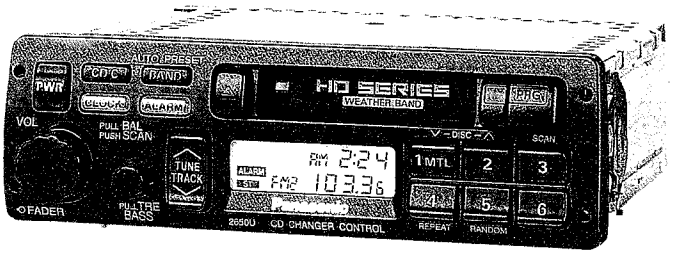
ORDER NO. ACED9803501
C1

Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS

CQ-2650EU/2500CEU

Heavy Duty Cassette/Weatherband Receiver with Changer Control



<CQ-2650EU>

Specifications*

General

Power Supply	: 12V DC (11V-16V) Test Voltage 14.4V, Negative ground
Maximum Power Output	: 35 W × 4 channels at 400Hz, [CQ-2650EU] 22 W × 4 channels at 400Hz, [CQ-2500CEU]
Power Output	: 9 W per channel into 4 ohms, 40 to 30,000Hz, at 3% THD
Tone Action	: Bass; ±10 dB at 100Hz Treble; ±10 dB at 10kHz Bass; +6 dB at 100Hz (loudness built-in) Treble; +6 dB at 10kHz (loudness built-in)
Current Consumption	: Less than 2.5 A (tape mode, 0.5W 4-speaker)
Speaker Impedance	: 4 Ω (4-8Ω acceptable)

AM Radio

Frequency Range	: 530 - 1,710kHz
Useable Sensitivity	: 28 dB/μV (25μV/ S/N 20 dB)

FM Stereo Radio

Frequency Range	: 87.9 - 107.9MHz
Useable Sensitivity	: 12 dBf. (1.1μV/ 75Ω, S/N 30 dB)
50 dB Quieting Sensitivity	: 17 dBf. (1.8μV/ 75Ω)
Frequency Response	: 30 - 15,000Hz ± 3 dB
Alternate Channel Selectivity	: 75 dB
Stereo Separation	: 35 dB at 1,000Hz
Signal/Noise Ratio	: 70 dB

WB Radio

Useable Sensitivity	: 3 dB/μV (S/N 20 dB)
Signal/Noise Ratio	: 50 dB (40 dB/μV)
Frequency Range	: 162.40 - 162.55MHz

Tape Player

Reproduction System	: 4-track, 2-program stereo
Tape Speed	: 1-7/8" /sec (4.76 cm/sec)
FF/REW Time	: Less than 180 sec (C-60)
Frequency Response	: 35 - 14,000Hz ± 3 dB
Wow and Flutter	: 0.12% (WRMS)
Signal/Noise Ratio	: 52 dB

Dimensions**	: 7" × 1-15/16" × 5-7/8" (178 × 50 × 150mm)
Weight**	: 3 lbs. 8 oz (1.6kg)

* Specifications and the design are subject to possible modification without notice due to improvements.

** Dimensions and weight shown are approximate.

• Above specifications comply with EIA standards.

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⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could result in serious injury or death.

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FEATURES

- 6-FM1/ FM2, 6-AM, 6-WB preset.
- Auto Station Preset.(FM2 Band only)
- Power amplifier output : 35W × 4 (CQ-2650EU)
  : 22W × 4 (CQ-2500CEU)
- CD Chabger Control (only for CQ-2650EU)
- Clock function.

REPLACING THE FUSE

Be sure to use a fuse of the specified rating (10A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

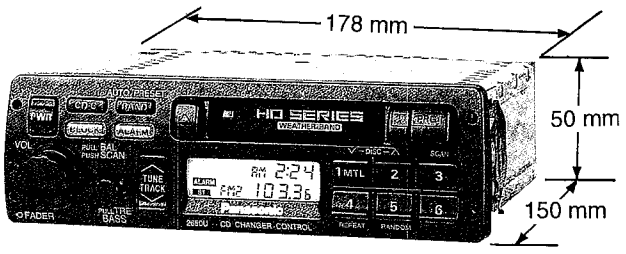
MAINTENANCE

Your product is designed and manufactured to ensure a minimum of maintenance. Use a soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvent.

RADIO ALIGNMENT

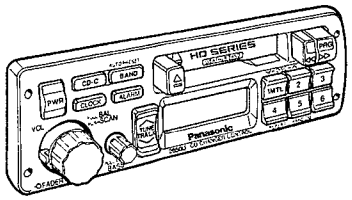
Do not align the AM/FM and WB (Weather Band) package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

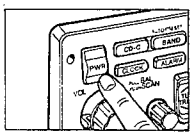
DIMENSIONS



< OPERATING INSTRUCTIONS >

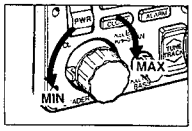
Power and Sound Controls





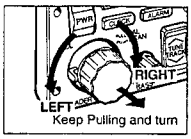
Power

Turn the ignition key on.
Press PWR to switch on the power.
To turn the power off, **press** PWR again.



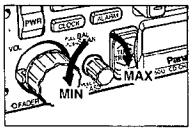
Volume

Turn the knob clockwise to increase volume, and counterclockwise to decrease volume.



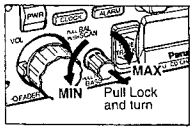
Balance

Keep pulling the knob and turn it to the left or right to shift the sound volume to the left or right speakers.

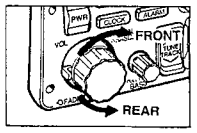


Bass and Treble

Bass control : Turn the knob to adjust bass response.



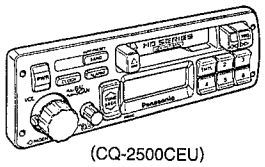
Treble control : Pull and lock the knob and turn to adjust treble response.
After adjusting, press the knob in.



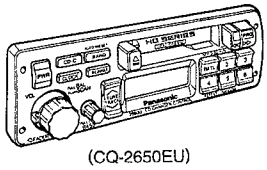
Fader

Turn to the left or right to shift the sound volume to the rear or front speakers.

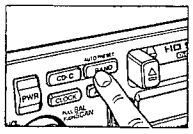
Radio Basics



(CQ-2500CEU)



(CQ-2650EU)

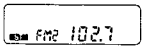


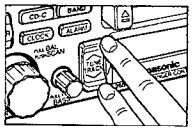
Selecting a Band

Press BAND to select the bands in the following order.

FM1 ➡ FM2 ➡ WB (Weather Band) ➡ AM

"ST" indicator lights if the station is broadcasting in stereo.



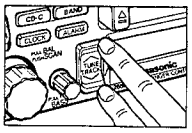


Manual Tuning

Press "∨ TUNE" or "∧ TUNE" to move to a lower or higher frequency.

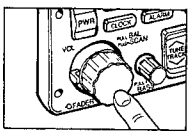
Automatic Tuning

Two kinds of automatic tuning are available for selection. They are Seek Tuning and Scan Tuning.



Seek Tuning

Press and hold "∨ TUNE" or "∧ TUNE" for more than a half second, then release. The radio automatically stops on the next station.



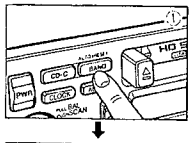
Scan Tuning

Press the knob to scan the next stations for about 5 seconds sequentially upward.

Preset Station Setting

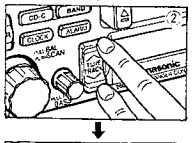
Up to 18 stations can be preset in the station memory as follows;

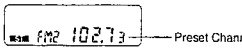
FM1	FM2	AM
6 stations	6 stations	6 stations



Manual Station Preset

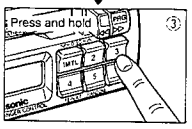
1 Press BAND to select a desired band.
2 Use manual or seek tuning to find a station that you want to program into memory.
3 Press and hold one of the station selector buttons 1 through 6 until the display blinks. The memory is now set for that button on the band you have selected.
Repeat the process to set other stations for the FM1 to AM bands.





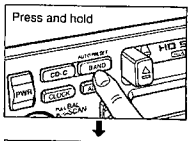
Preset Channel Indicator

Note: You can change the memory setting by repeating the above procedure.



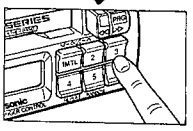
Tuning in a Preset Station

Press any of the buttons 1 through 6 to tune in the preset station.



Auto Station Preset (For FM2 only)

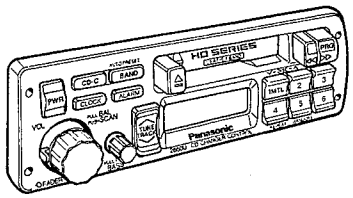
Select a FM band and press and hold BAND for more than 2 seconds.
- The six strongest available stations will be automatically stored in memory preset buttons 1 through 6 of FM2 band.
- Once set, the preset stations are sequentially scanned for 5 seconds. (To stop the scanning, press one of the preset button.)

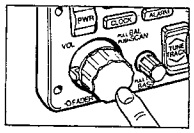


- Press the appropriate preset button for the station you want to hear.

CAUTION: For safety reasons, do not attempt to program while driving.

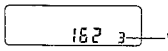
Radio Basics Continued





Weather Band (W/B) Preset

When the knob (VOL) is pressed in Weather Band mode, channel number 1 to 7 automatically scans in order. (The frequency (162) remains unchanged but blinking). To stop the scanning, press the knob (VOL) again.



Weather Band frequency number.

Tuning in a Weather Band Station

Press any of the buttons 1 through 6 to tune in the station preset by the above.

Note: The weather band (CH1-6) has been preset in advance. CH7 is selected by pressing "∧TUNE" or "∨TUNE".

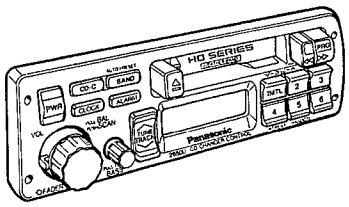
Weather Band Stations

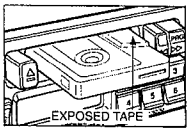
National Weather Radio Broadcasts from over 380 locations throughout the U.S. on seven VHF/FM frequencies.
Tune to weather band to receive continuous weather information 24 hours a day on one of the following frequencies.

1. 162.550 MHz
2. 162.400 MHz
3. 162.475 MHz
4. 162.425 MHz
5. 162.450 MHz
6. 162.500 MHz
7. 162.525 MHz

Occasionally the frequency of an existing or planned station must be changed because of unexpected radio frequency interference with adjacent NOAA Weather Radio Stations and/or with other Government or Commercial Operations within the area. If you have a question concerning NOAA Weather Radio please contact your nearest National Weather Service Office.

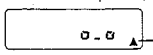
Cassette Tape Player Basics



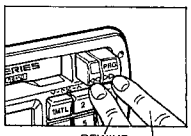


Loading a Cassette

Gently insert the cassette with the exposed tape facing to the right until the mechanism captures it, and playback starts.

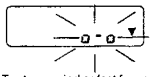


PROGRAM INDICATOR

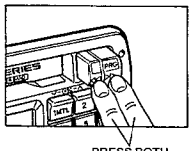


Rewind and Fast Forward

Press and engage either ◄◄ (REW) to rewind or ►► (FF) to fast forward the tape.

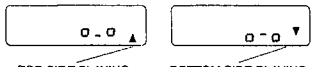


To stop rewind or fast forward, gently press the button that is not in use. The tape will resume playing from that position.
If you rewind the tape fully, it will play on the same program side again.
If you fast forward to the end, play will resume from the beginning of other side of the tape.



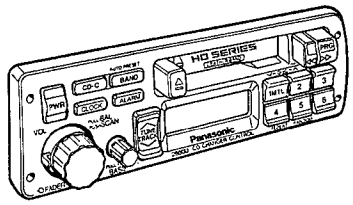
Changing Sides

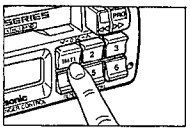
Firmly press ◄◄ (REW) and ►► (FF) at the same time to switch to the program on the other side of the tape.
The display changes to indicate which program is playing.



TOP SIDE PLAYING BOTTOM SIDE PLAYING

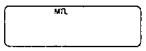
Cassette Tape Player Basics continued



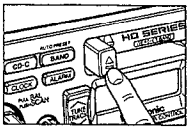


Metal Tape Mode

Press MTL when playing metal or chromium dioxide (CrO_2) tapes.
To turn it off, press MTL again.



Note: Playing non-metal tapes in MTL mode causes high frequency imbalance, which affects tone quality.



Stopping and Ejecting the Tape

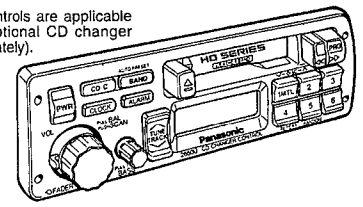
Once inserted into the unit, your tape will play continuously until you eject it.
If you press and engage ⏏, the unit clears the tape and returns to radio operation.
When you shut off the vehicle engine, the tape will stop but not eject.

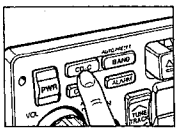
Note: Always remove the cassette when you are done using the cassette player. This will prolong the life of your tape.

CAUTION: To maintain your cassette player in top condition, avoid using tapes that are longer than 90 minutes (C-90).

CD Changer Basics (Only for CQ-2650EU)

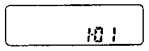
Note:
CD changer controls are applicable to units with optional CD changer unit (sold separately).



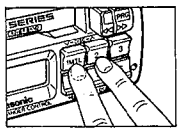


To start the CD Player

With a disc magazine inserted in the CD Changer, press CD • C. Play starts from first track.

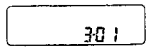


Note: The cassette, if loaded, should be removed. Otherwise, the CD play won't start.

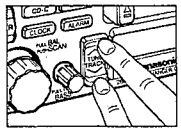


Selecting a Disc

Press "∨-DISC" or "DISC-∧" to select discs in descending or ascending order.



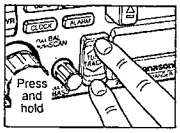
The disc number indicator blinks and the track number indicator stays illuminated until the selected disc is loaded.



Selecting a Track

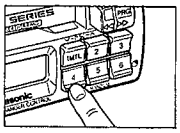
Press "TRACK∧" once to go to the next track. Press repeatedly to step forward through all the tracks.
Press "∨TRACK" once to play from the beginning of the current track. Press twice to play the previous track. Press repeatedly to step backward through all the tracks.

CD Changer Basics continued (Only for CQ-2650EU)



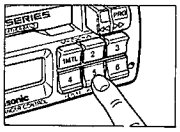
Searching a Track

Press and hold "TRACK ∧" or "∨ TRACK" for more than a half second to activate fast forward or reverse through a track. Release "TRACK ∧" or "∨ TRACK" to resume the normal CD play from that position.



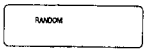
Repeating a Track

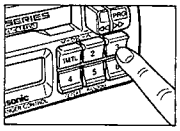
Press REPEAT to repeat the current selection. "REPEAT" indicator lights. The current selection continues to repeat until you press REPEAT again.



Random Selection

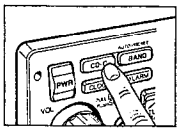
Press RANDOM. "RANDOM" indicator lights. A random selection of music is played from all available CDs. To turn it off, press RANDOM again.





Scanning Tracks

Press SCAN. The display blinks and the first 10 seconds of each track on the discs play in sequence.
To stop scanning and continue with the current track, press SCAN again.



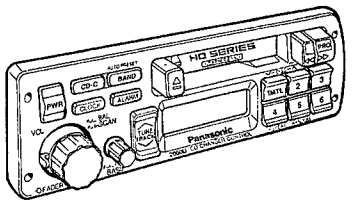
Changing the Display

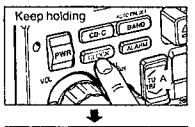
Press CD·C to switch the display in sequence as follows.

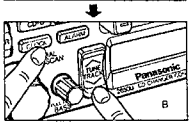
Disc/Track Number
↕
Track Play Time

Note: To change to the Radio mode, press BAND.

Clock Basics (The clock system is 12-hours)



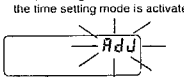




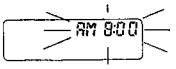
Initial Time Setting

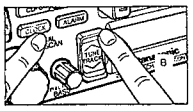
Press and hold CLOCK at all the time while setting the time.

A Keep holding CLOCK and the "AdJ" blinks on the display, indicating the time setting mode is activated.

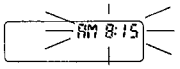


B To set hours, press "∨ TUNE".

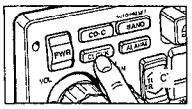




To set minutes, press "∧ TUNE".



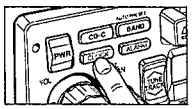
Hold "∧" or "∨" to change numbers rapidly.



C When you have set the time, release CLOCK.

Resetting the Time

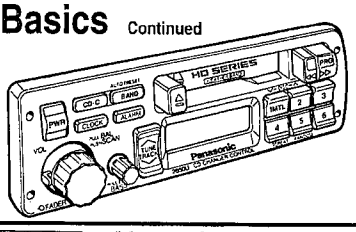
When you want to reset the time, repeat steps A to C above.

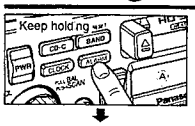


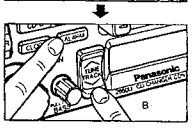
Selecting the Clock Display

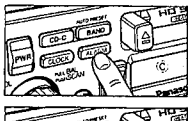
Press CLOCK to display alarm time.
After a few seconds, current time returns on display.
Note: The current time will display at all the time even the power of the radio is turned off. In this case, it is normal.

Clock Basics Continued





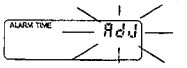




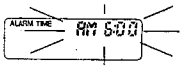
Alarm time Setting

Press and hold ALARM at all the time while setting the time.

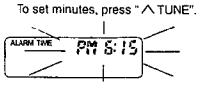
A Keep holding ALARM for seconds and the "AdJ" blinks on the display, indicating the time setting mode is activated.



B To set hours, press "∨ TUNE".



To set minutes, press "∧ TUNE".



Hold "∧" or "∨" to change numbers rapidly.

C When you have set the time, release ALARM.

Resetting the Alarm time

When you want to reset the alarm time, repeat steps A to C above.

Alarm Operation

A Alarm is switched to ON or OFF each time ALARM is pressed.
B When the Alarm is switched to ON, the alarm sound will activate at the set alarm time.

Turning off the Alarm Sound

The alarm sound will turn off automatically after 90 seconds. Otherwise, press ALARM once.

CAUTION:
- Be careful not to set the wrong alarm time because, otherwise, the alarm may sound while driving.
- If the alarm is set, be sure to check the set alarm time by pressing CLOCK.
- If you operate the radio, etc. at the time set the alarm, the alarm sound may be muted.

Installation Guide

⚠ WARNING

This installation information is designed for experienced installers and is not intended for non-technical individuals. It does not contain warnings or cautions of potential dangers in attempting to install this product.

Any attempt to install this product in a motor vehicle by anyone other than qualified installer could cause damage to the electrical system and could result in serious personal injury or death.

❑ Overview

This equipment should be installed by a professional. However, if you plan to install this unit yourself, your first step is to decide where to install it. The instructions in these pages will guide you through the remaining steps: (Please refer to "WARNING" statement above).

- Identify and label the vehicle wires
- Connect the vehicle wires to the wires of the power connector
- Install the unit in the dash
- Check the operation of the unit

If you do encounter problems, please consult your nearest professional installer.

CAUTION: This unit will operate with a 12 volt DC negative ground auto battery system only. Do not attempt to use it in any other system. Doing so could cause serious damage.

Before you begin installation, look for the following items included in the packing with your unit.

- **Warranty Card** ..... Fill this out promptly
- **PASC Servicenter Directory** ..... Keep for future reference in case the unit needs servicing
- **Installation Hardware** ..... Needed for in-dash installation

❑ Installation Hardware

No.	Item	Diagram	Qty
①	Mounting Collar		1
②	Plain Washer (5 mmϕ)		2
③	Spring Washer (5 mmϕ)		2
④	Hex. Nut (5 mmϕ)		2
⑤	Rear Support Strap		1
⑥	Hex. Bolt (5 mmϕ x 25 mm)		1
⑦	Toothed Lock Washer (5 mmϕ)		1
⑧	Dismounting Pin (U-shaped)		2

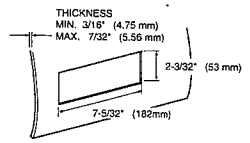
Installation Guide continued

❑ Required Tools

You'll need a screwdriver, a 1.5 volt AA battery, and the following:

12 V DC TEST BULB | ELECTRICAL TAPE | SIDE-CUT PLIERS

❑ Dashboard Specifications



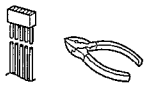
❑ Identify All Leads

The first step in installation is to identify all the vehicle wires you'll use when hooking up your sound system.
As you identify each wire, we suggest that you label it using masking tape and a permanent marker. This will help avoid confusion when making connections later.

Note: Do not connect the power connector to the stereo unit until you have made all connections. If there are no plastic caps on the stereo hooking wires, insulate all exposed leads with electrical tape until you are ready to use them. Identify the leads in the following order.

Power Lead
If your vehicle has a radio or is pre-wired for one :

Cut the connector plug off (leaving the leads as long as possible) so that you can work with individual leads.



Turn the ignition on to the accessory position, and ground one lead of the test bulb to the chassis.

Touch the other lead of the test bulb to each of the exposed wires from the cut radio connector plug. Touch one wire at a time until you find the outlet that causes the test bulb to light.

Now turn the ignition off and then on. If the bulb also turns off and on, that outlet is the vehicle power lead.

If your vehicle is not wired for an audio unit :
Go to the fuse block and find the fuse port for radio (RADIO), accessory (ACC), or ignition (IGN).

Battery Lead
If your stereo unit has a yellow lead, you will need to locate the vehicle's battery lead. Otherwise you may ignore this procedure. (The yellow battery lead provides continuous power to maintain a clock, memory storage, or other function.)

If your vehicle has a radio or is pre-wired for one:
With the ignition and headlights off, identify the vehicle battery lead by grounding one lead of the test bulb to the chassis and checking the remaining exposed wires from the cut radio connector plug.

If your vehicle is not wired for an audio unit :
Go to the fuse block and find the fuse port for the battery, usually marked BAT.

Speakers
Identify the vehicle speaker leads. There will be two leads for each speaker, usually color coded.

A handy way to identify the speaker leads and the speaker they connect with is to test the leads using a 1.5 volt AA battery as follows.

Hold one lead against one pole of the battery and stroke the other lead across the other pole. You will hear a scraping sound in a speaker if you are holding a speaker lead.
If not, keep testing different lead combinations until you have located all the speaker leads. When you label them, include the speaker location for each.

Antenna
The antenna lead is a thick, black wire with a metal plug at the end.

❑ Connect All Leads

Now that you have identified all the wires in the vehicle, you're ready to begin connecting them to the stereo unit wires. The connection diagram on Page 20 shows the proper connections and color coding of the leads.
We strongly recommend that you test the unit before making a final installation.
You can set the unit on the floor and make temporary connections to test the unit. Use electrical tape to cover all exposed wires.

IMPORTANT : Connect the red power lead last, after you have made and insulated all other connections.

Ground
Connect the black ground lead of the power connector to the metal vehicle chassis.

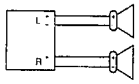
Speakers
Connect the speaker wires. See the wiring diagram below for the proper hookups. Follow the diagram carefully to avoid damaging the speakers and the stereo unit.

The speaker used must be able to handle more than 35 watts (CQ-2500CEU needs 22 watts) of audio power. Speakers with low input ratings can be damaged.

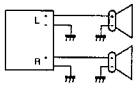
Speaker impedance should measure 4 - 8 ohms, which is typically marked on most speakers. Lower or higher impedance speakers will affect output and can cause both speaker and stereo unit damage.

CAUTION : Never ground the speaker cords. For example, do not use a chassis ground system or a three-wire speaker common system. Each speaker must be connected separately using parallel insulated wires. If in doubt about how your vehicle's speakers are wired, please consult with your nearest professional installer.

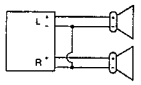
CORRECT
No Common Ground



INCORRECT
Common Chassis Ground



INCORRECT
Speaker Common
(common earth lead)



Installation Guide continued

Battery
Connect the yellow battery lead to the correct radio wire or to the battery fuse port on the fuse block.

Antenna
Connect the antenna by plugging the antenna lead into the antenna receptacle.

Equipment
Connect any optional equipment such as amplifier, according to the instructions furnished with the equipment. Keep about 12 inches (30 cm) of distance between the speaker cords/amplifier unit and the antenna/antenna extension cord. Read the operating and installation instructions for any equipment you will connect to this unit.

Power
Connect the red power lead to the correct vehicle radio wire or to the appropriate fuse port on the fuse block.

If the stereo unit functions properly with all these connections made, disconnect the wires and proceed to the final installation.

❑ Final Installation

Lead Connections
Connect all wires, making sure that each connection is insulated and secure. Bundle all loose wires and fasten them with tape so they won't fall down later. Now insert the stereo unit into the mounting collar.

Congratulations! After making a few final checks, you're ready to enjoy your new auto stereo system.

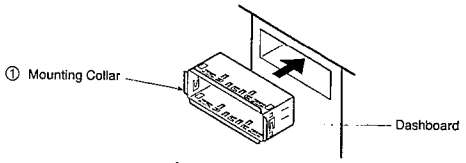
❑ Final Checks

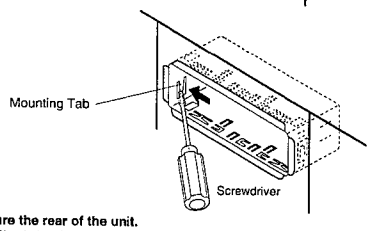
1. Make sure that all wires are properly connected and insulated.
2. Make sure that the stereo unit is securely held in the mounting collar.
3. Turn on the ignition to check the unit for proper operation.

If you have difficulties, consult your nearest authorized professional installer for assistance.

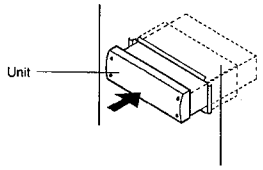
❑ Installation Procedures

1. Secure the Mounting Collar ①.
Insert Mounting Collar ① into the vehicle's dashboard, and bend mounting tabs out with a screwdriver.





2. Secure the rear of the unit.
a) Check the electrical connection by referring to this operating instructions.
b) Insert the unit into Mounting Collar ① and push it in until "click" is heard.

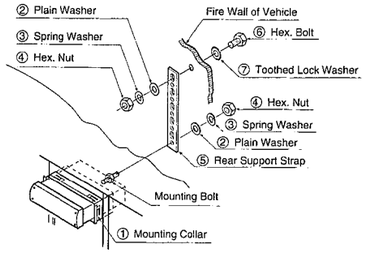


c) Secure the rear of the unit to the vehicle by either of the two recommended methods on the next page.

Installation Guide continued

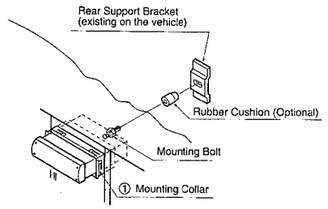
■ **Using the Rear Support Strap ⑤**

Affix one end of the Rear Support Strap ⑤ to the rear of the unit, and the other end to the Fire Wall of Vehicle, or some other metallic area.

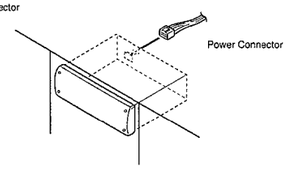


■ **Using the Rubber Cushion (Optional)**

(If there is an existing Rear Support Bracket on the Fire Wall of Vehicle.)
Cover Mounting Bolt on the rear of the unit with Rubber Cushion (Optional), and mount it into the existing Rear Support Bracket.



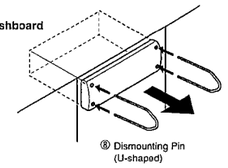
3. Plug the Power Connector



4. After installation reconnect the negative (−) battery terminal.

To Remove the Unit from the vehicle's dashboard

Insert Dismounting Pins ⑧ and pull both pins.

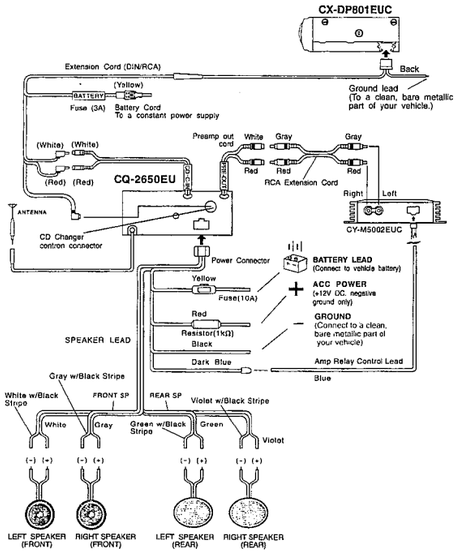


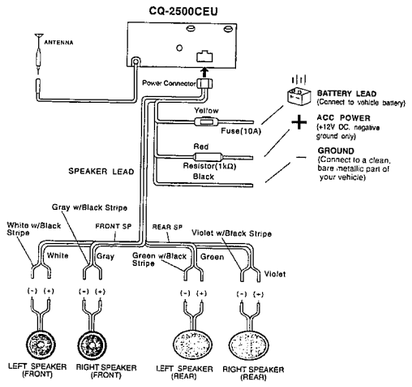
Note: Do not lose Dismounting Pins. They will be needed to remove the unit from the vehicle's dashboard.

Installation Guide continued

- This unit can be connected to an optional CD changer (CX-DP801EUC or CX-DP1200EUC). For details consult your nearest Panasonic dealers.
- For connection to a CD changer, refer to the operating instructions of the CD Changer (CX-DP801EUC or CX-DP1200EUC).
- Fader Control does not affect the output of the amplifier connected to this unit's preout cord.

Caution:
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
- Be sure to connect the ground lead (black) to the vehicle chassis first before connecting the other leads to the specified wires of the vehicle.
- Be sure to insulate any exposed wires from a possible short-circuit from the vehicle chassis. Bundle all cables and keep cable terminals free from touching any metal parts.





Troubleshooting

Troubleshooting continued

❑ **Notes on Cassette Tapes**

TERMINALS DESCRIPTION (Main Block)

■IC600 YEAM17708556

Pin No.	Name	Description	I / O	Vol.(V) AM	FM	TAPE
1	BATT	Battery Detection	I	5.2	5.2	5.2
2	REMIN (NC)	—	—	—	—	—
3	MODE4 (NC)	—	—	—	—	—
4	CD SENS	(Connect to ground)	—	0	0	0
5	MS	(Connect to ground)	—	0	0	0
6	R-REEL	(Connect to ground)	—	0	0	0
7	F-REEL	(Connect to ground)	—	0	0	0
8	CD EX	(Connect to ground)	—	0	0	0
9	ST	Stereo indicator	I	5.3	5.3	0
10	MTL	Deck metal output H:ON L:OFF	O	0	0	0
11	DOLBY ON/OFF (NC)	—	—	—	—	—
12	DOLBY B/C (NC)	—	—	—	—	—
13	LED (NC)	—	—	—	—	—
14	ACC	ACC Detection	I	5.1	5.1	5.1
15	MMT-R (CD mute)	(Connect to ground)	—	0	0	0
16	MMT-F (CD reset)	(Connect to ground)	—	0	0	0
17	FM	FM Switch	O	8.4	0	0
18	RADIO ON	Power supply, AM/FM Tuner	O	0	0	9.1
19	WB	Power supply, W/B Tuner	O	8.5	8.5	9.1
20	SSC	FM /AM SSC control	O	0	0	0
21	GND	Ground	—	0	0	0
22	TEL MS (NC)	—	—	—	—	—
23	TEL SEN (NC)	—	—	—	—	—
24	INIT B	(Pull-down)	—	0	0	0
25	INIT A	(Connect to ground)	—	0	0	0
26	SD FM	FM SD input	I	1.5	0.8	0
27	SD AM	AM SD input	I	1.8	1.8	1.3

Pin No.	Name	Description	I / O	Vol.(V) AM	FM	TAPE
28	AMIFC	AM IF input	I	0	0	0
29	FMIFC	FM IF input	I	0.5	0.5	0.5
30	VDD	Power supply +5V	—	4.7	4.7	4.8
31	FM OSC	FM OSC input	I	2.4	2.5	0
32	WB OSC	WB OSC input	I	0	0	0
33	GND	Ground	—	0	0	0
34	E01	FM /AM VT output	O	1.4	1.5	1.5
35	E02 (NC)	—	—	—	—	—
36	NC	(Connect to ground)	—	0	0	0
37	MONO (NC)	—	—	—	—	—
38	LOC (NC)	—	—	—	—	—
39	(NC)	—	—	—	—	—
40	BEEP	Beep Sound Output	O	0	0	0
41	CD CLK2 (NC)	—	—	—	—	—
42	CDC STB	CD changer Strobe	I	0	0	0
43	TAPE EXIST	T-in SW input	I	0	0	4.7
44	A/B	Tape A/B side detection	I	0.5	0.5	0.5
45	TAPE SLOW (NC)	—	—	—	—	—
46	F/R	Head SW change over detection	O	0	0	5.2
47	PW CNT	Power control	O	4.6	4.6	4.7
48	SYS CNT	AMP ST-BY control	O	4.6	4.6	4.7
49	MUTE	Mute output("L": mute ON)	O	4.7	4.7	4.8
50	CD PW ON (NC)	—	—	—	—	—
51	PL ON (NC)	—	—	—	—	—
52	CD GAIN(NC)	—	—	—	—	—
53	CDC SELECT (NC)	—	—	—	—	—
54	MONOCNT(NC)	—	—	—	—	—

Pin No.
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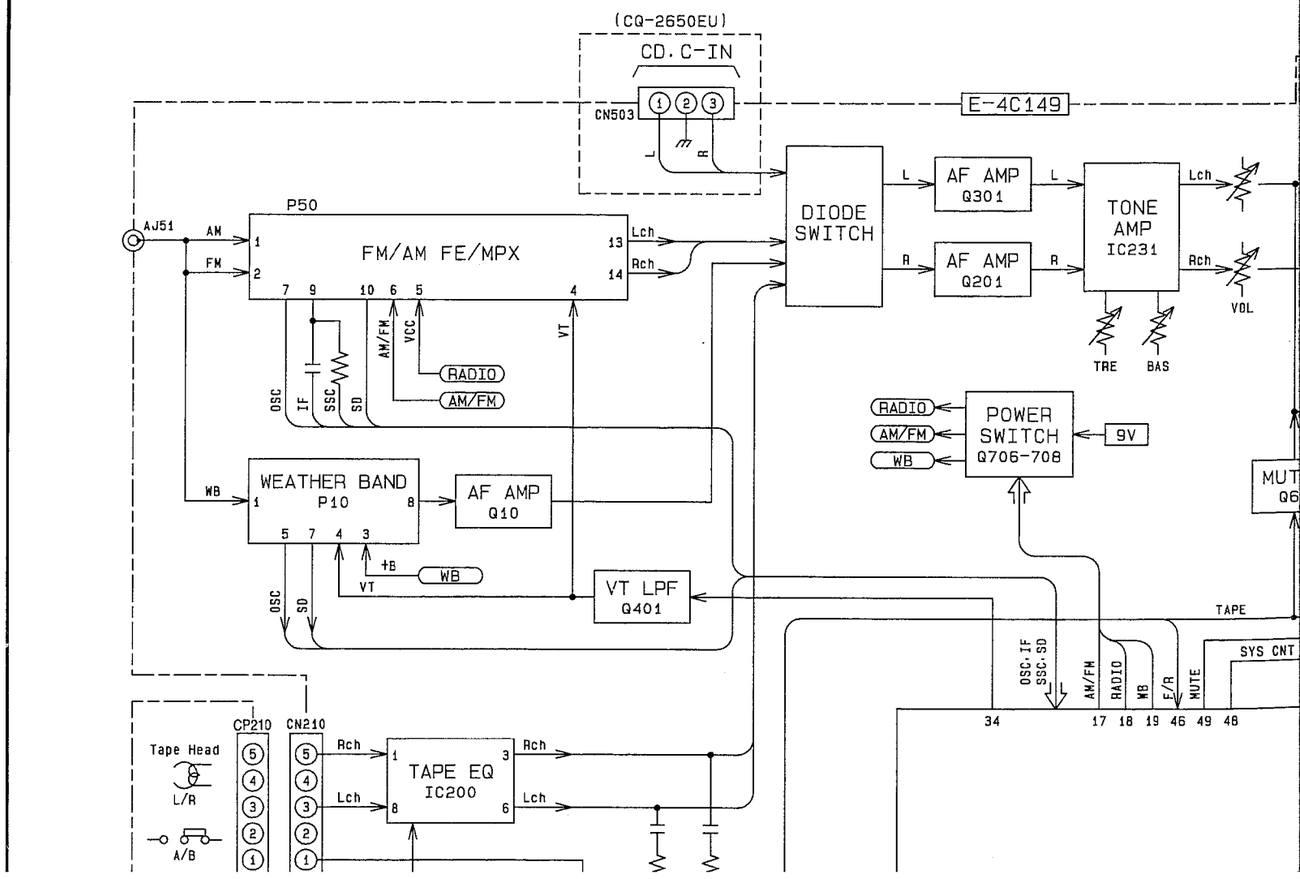
BLOCK DIAGRAM MODELS CQ-2650EU/2500CEU



TERMINALS DESCRIPTION (Main Block)

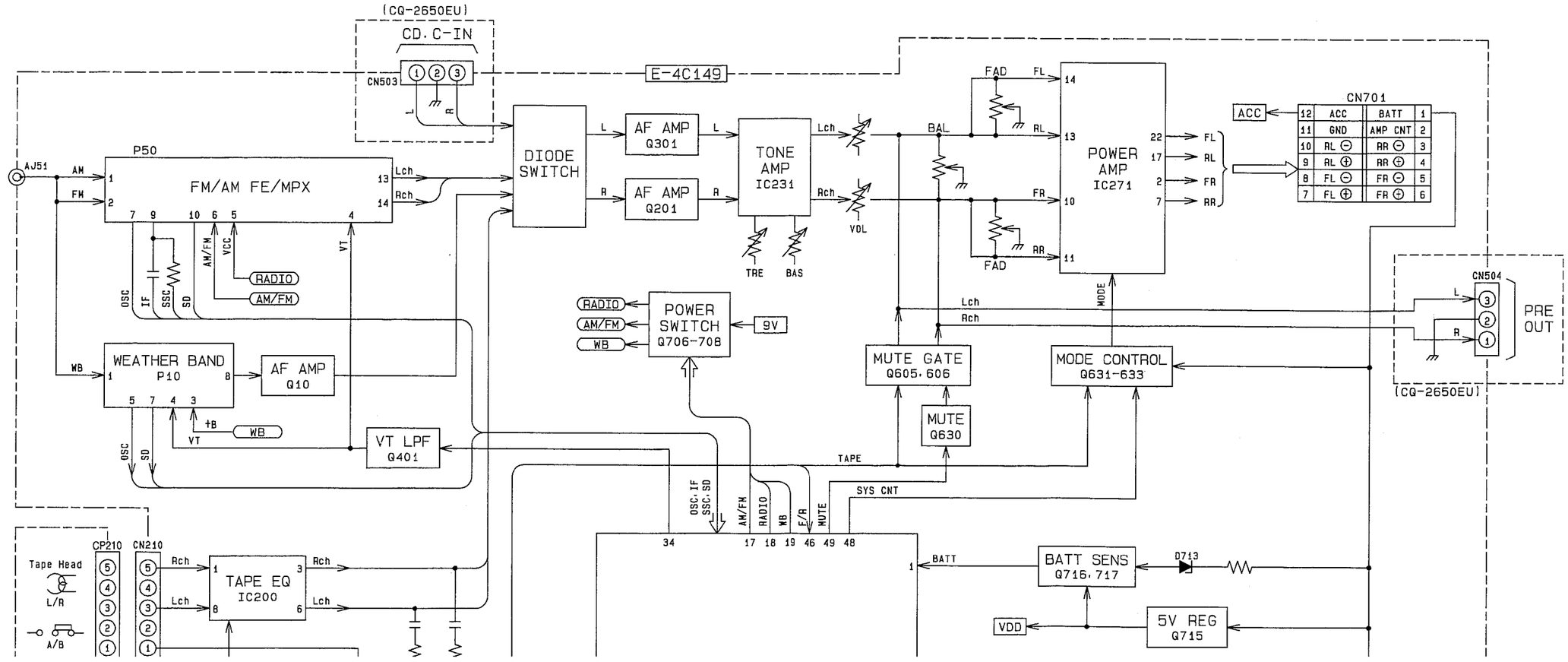
■IC600 YEAM17708556

Pin No.	Name	Description	I / O	Vol.(V) AM	FM	TAPE
1	BATT	Battery Detection	I	5.2	5.2	5.2
2	REMIN (NC)	—	—	—	—	—
3	MODE4 (NC)	—	—	—	—	—
4	CD SENS	(Connect to ground)	—	0	0	0
5	MS	(Connect to ground)	—	0	0	0
6	R-REEL	(Connect to ground)	—	0	0	0
7	F-REEL	(Connect to ground)	—	0	0	0
8	CD EX	(Connect to ground)	—	0	0	0
9	ST	Stereo indicator	I	5.3	5.3	0
10	MTL	Deck metal output H:ON L:OFF	O	0	0	0
11	DOLBY ON/OFF (NC)	—	—	—	—	—
12	DOLBY B/C (NC)	—	—	—	—	—
13	LED (NC)	—	—	—	—	—
14	ACC	ACC Detection	I	5.1	5.1	5.1
15	MMT-R (CD mute)	(Connect to ground)	—	0	0	0
16	MMT-F (CD reset)	(Connect to ground)	—	0	0	0
17	FM	FM Switch	O	8.4	0	0
18	RADIO ON	Power supply, AM/FM Tuner	O	0	0	9.1
19	WB	Power supply, W/B Tuner	O	8.5	8.5	9.1
20	SSC	FM /AM SSC control	O	0	0	0
21	GND	Ground	—	0	0	0
22	TEL MS (NC)	—	—	—	—	—
23	TEL SEN (NC)	—	—	—	—	—
24	INIT B	(Pull-down)	—	0	0	0
25	INIT A	(Connect to ground)	—	0	0	0
26	SD FM	FM SD input	I	1.5	0.8	0
27	SD AM	AM SD input	I	1.8	1.8	1.3

Pin No.	Name	Description	I / O	Vol.(V) AM	FM	TAPE
28	AMIFC	AM IF input	I	0	0	0
29	FMIFC	FM IF input	I	0.5	0.5	0.5
30	VDD	Power supply +5V	—	4.7	4.7	4.8
31	FM OSC	FM OSC input	I	2.4	2.5	0
32	WB OSC	WB OSC input	I	0	0	0
33	GND	Ground	—	0	0	0
34	E01	FM /AM VT output	O	1.4	1.5	1.5
35	E02 (NC)	—	—	—	—	—
36	NC	(Connect to ground)	—	0	0	0
37	MONO (NC)	—	—	—	—	—
38	LOC (NC)	—	—	—	—	—
39	(NC)	—	—	—	—	—
40	BEEP	Beep Sound Output	O	0	0	0
41	CD CLK2 (NC)	—	—	—	—	—
42	CDC STB	CD changer Strobe	I	0	0	0
43	TAPE EXIST	T-in SW input	I	0	0	4.7
44	A/B	Tape A/B side detection	I	0.5	0.5	0.5
45	TAPE SLOW (NC)	—	—	—	—	—
46	F/R	Head SW change over detection	O	0	0	5.2
47	PW CNT	Power control	O	4.6	4.6	4.7
48	SYS CNT	AMP ST-BY control	O	4.6	4.6	4.7
49	MUTE	Mute output("L": mute ON)	O	4.7	4.7	4.8
50	CD PW ON (NC)	—	—	—	—	—
51	PL ON (NC)	—	—	—	—	—
52	CD GAIN(NC)	—	—	—	—	—
53	CDC SELECT (NC)	—	—	—	—	—
54	MONOCNT(NC)	—	—	—	—	—

Pin No.	Name	Description	I / O	Vol.(V) AM	FM	TAPE
55	MONOCNT2(NC)	—	—	—	—	—
56	LCD CLK	LCD Clock	O	0	0	0
57	LCD DI	LCD Data input	O	0	0	0
58	LCD CE	LCD Chip enble	O	0	0	0
59	LCD DO	LCD Data output	I	4.1	4.1	4.1
60	CD CNT	CD Control signal output	O	0	0	0
61	HDB(NC)	—	—	—	—	—
62	REMOUT	Remoto Data output	O	4.7	4.7	4.7
63	I2C DATA (NC)	—	—	—	—	—
64	I2C CLK (NC)	—	—	—	—	—
65	CDC CLK	CD Changer Clock	I	0	0	0
66	MOTOR ANT (NC)	—	—	—	—	—
67	CDC DATA	CD Changer Data	I	0	0	0
68	MODE3	(Connect to ground)	—	0	0	0
69	MODE2	(Connect to ground)	—	0	0	0
70	MODE1	(Connect to ground)	—	0	0	0
71	SMT-R (NC)	—	—	—	—	—
72	SMT-F (NC)	—	—	—	—	—
73	TELMUTE	(Connect to ground)	—	0	0	0
74	VTER (NC)	—	—	—	—	—
75	GND	(Connect to ground)	—	0	0	0
76	X OUT	Crystal oscilator	O	2.1	2.1	2.2
77	X IN	Crystal oscilator	I	1.9	1.9	2.1
78	CE	Chip enable	I	4.7	4.7	4.8
79	VDD	Power supply +5V	—	4.7	4.7	4.8
80	RESET	Reset input	I	4.7	4.7	4.8

BLOCK DIAGRAM MODELS CQ-2650EU/2500CEU



BATTERY LEAD
(Connect to vehicle battery)

ACC POWER
(+12V DC negative ground only)

GROUND
(Connect to a clean, bare metallic part of your vehicle)

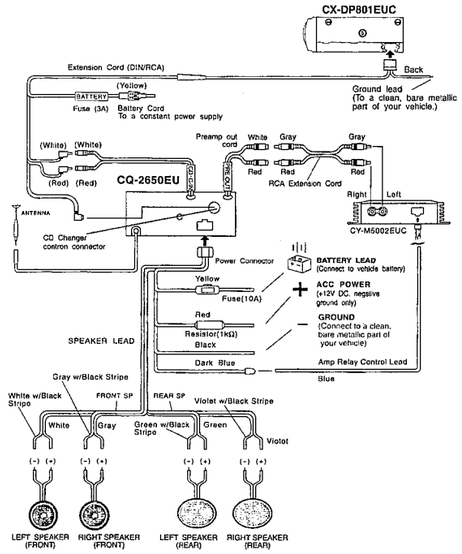
24	INIT B	(Pull-down)	—	0	0	0
25	INIT A	(Connect to ground)	—	0	0	0
26	SD FM	FM SD input	I	1.5	0.8	0
27	SD AM	AM SD input	I	1.8	1.8	1.3

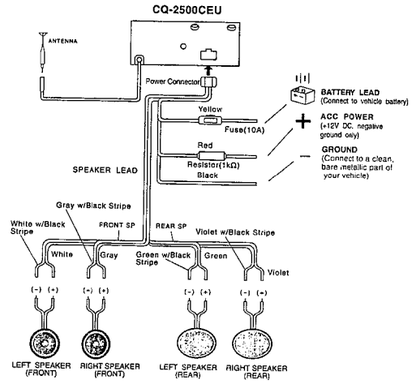
51	PL ON (NC)	—	—	—	—	—
52	CD GAIN(NC)	—	—	—	—	—
53	CDC SELECT (NC)	—	—	—	—	—
54	MONOCNT(NC)	—	—	—	—	—

Installation Guide continued

- This unit can be connected to an optional CD changer (CX-DP801EUC or CX-DP1200EUC). For details consult your nearest Panasonic dealers.
- For connection to a CD changer, refer to the operating instructions of the CD Changer (CX-DP801EUC or CX-DP1200EUC).
- Fader Control does not affect the output of the amplifier connected to this unit's preout cord.

Caution:
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
- Be sure to connect the ground lead (black) to the vehicle chassis first before connecting the other leads to the specified wires of the vehicle.
- Be sure to insulate any exposed wires from a possible short-circuit from the vehicle chassis. Bundle all cables and keep cable terminals free from touching any metal parts.





Troubleshooting

❑ Maintenance
Your product is designed and manufactured to ensure a minimum of maintenance. Use a soft cloth for routine exterior cleaning. Never use benzine, thinner, or other solvent.

❑ When Something Doesn't Work
Check the charts on page 22, 23 for possible causes and solutions to any problem you might be experiencing. Some simple checks or minor adjustments may eliminate the problem.

❑ Product Servicing
If the suggestions in the charts don't solve the problem, we recommend that you take it to your nearest authorized PASC Servicenter. The unit should be serviced only by a qualified technician.

❑ Replacing the Fuse
Use fuses of the same specified rating (1 or 10 amps). Using different substitutes or fuses with higher ratings, or connecting the unit directly without a fuse, could cause fire or damage to the stereo unit.
If the replacement fuse fails, contact your nearest PASC Servicenter for service.

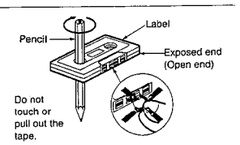
❑ Error Display Messages

F1	Displays when the compact disc is dirty or upside down. Selects the next available compact disc.
F2	Displays when compact disc is scratched. Selects next available compact disc.
F3	Displays when the compact disc stops operating for some reason. Please turn off the vehicle engine (ACC off) and remove the fuse from yellow lead for 1 minute. Then reinstall the fuse.
0000	Displays when there is no disc in the magazine.

Troubleshooting continued

❑ Notes on Cassette Tapes

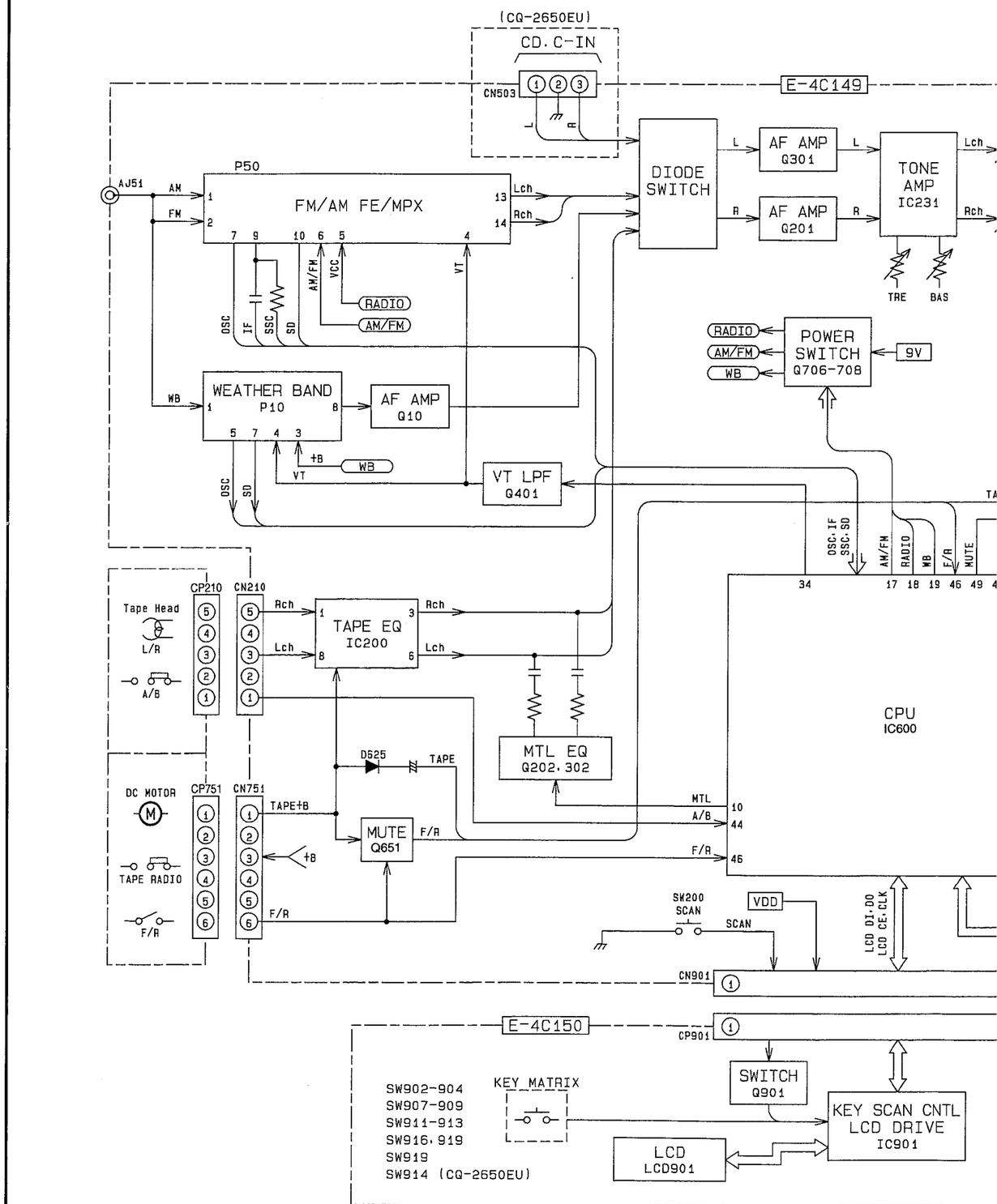
Tape Slack:
Use a pencil or similar object to take up the slack as shown. If a loose tape is used, this may result in the tape becoming tangled in the rotating parts of the unit.



❑ Troubleshooting Tips

PROBLEM	POSSIBLE CAUSE	PROBABLE SOLUTION
Unit won't turn on.	Dead vehicle battery. Ignition not on. Bad power line connection. Fuse burned out.	Charge vehicle battery. Turn ignition to On or Accessory. Check connections. Replace fuse.
Radio has static.	Antenna not hooked up. Close to high power lines.	Hook up antenna. Move away from high power lines.
Radio memory buttons don't work.	Not holding buttons down long enough.	Press and hold buttons for more than 2 seconds.
Tape sound quality is poor.	Heads are dirty. Poor quality tape.	Clean heads. (Ask a service representative for advice.) Use better quality tape.
Tape won't change programs.	Not pressing ▶▶(FF) and ◀◀(REW) buttons at the same time.	Press ▶▶(FF) and ◀◀(REW) buttons at the same time.
CD changer won't operate.	Unit not properly connected. Unit not switched into CD mode. No CDs in the magazine.	Check connections. Press CD•C button. Check disc magazine.
CD won't play a specific disc.	Disc loaded upside down. Disc damaged. Disc not loaded in magazine.	Reload disc properly. Check disc for scratches, chips. Check disc magazine.

BLOCK DIAGRAM MODELS CQ-2650EU/2500CEU

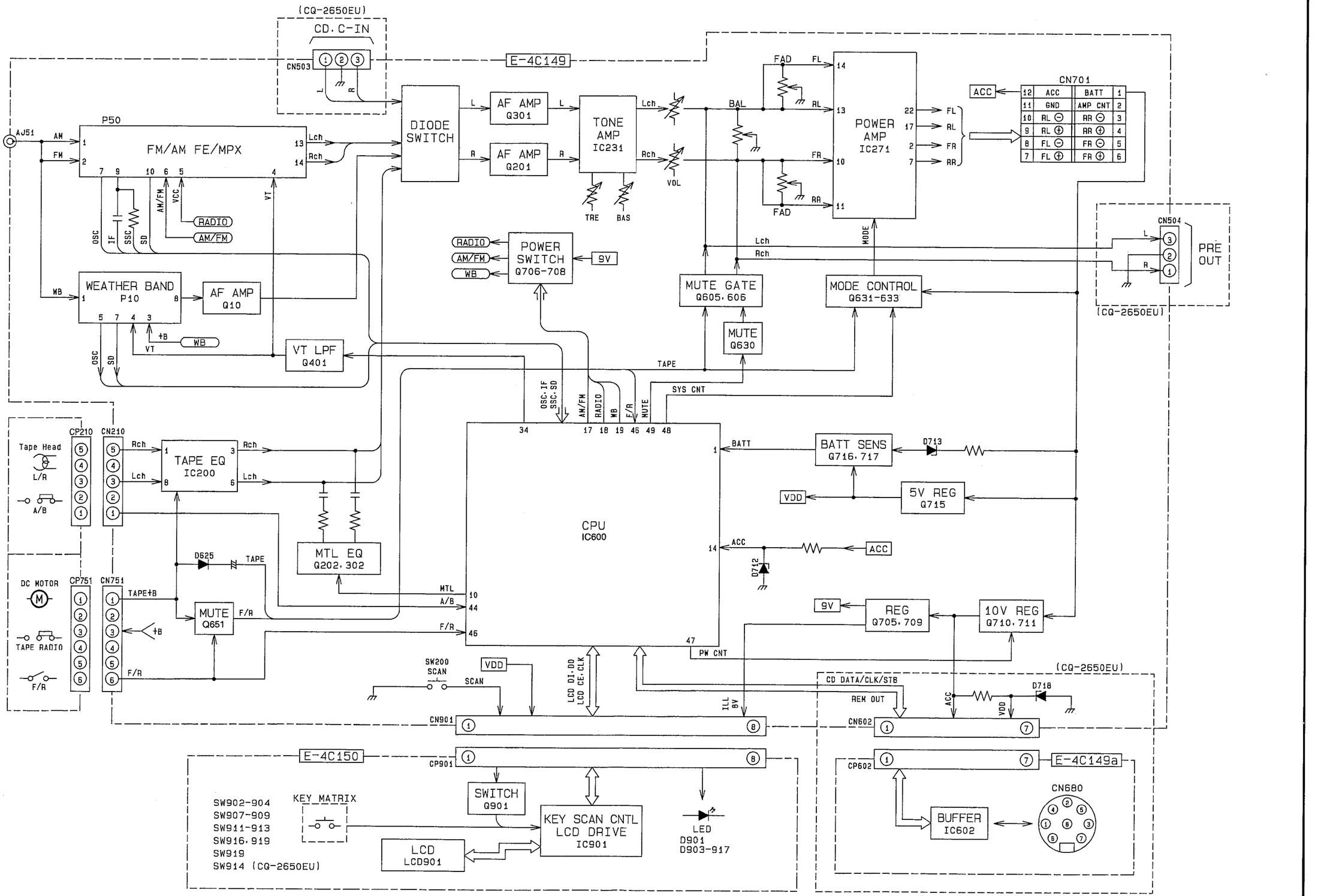


24	INIT B	(Pull-down)	—	0	0	0
25	INIT A	(Connect to ground)	—	0	0	0
26	SD FM	FM SD input	I	1.5	0.8	0
27	SD AM	AM SD input	I	1.8	1.8	1.3

51	PL ON (NC)	—	—	—	—	—
52	CD GAIN(NC)	—	—	—	—	—
53	CDC SELECT (NC)	—	—	—	—	—
54	MONOCNT(NC)	—	—	—	—	—

78	CE	Chip enable	I	4.7	4.7	4.8
79	VDD	Power supply +5V	—	4.7	4.7	4.8
80	RESET	Reset input	I	4.7	4.7	4.8

BLOCK DIAGRAM MODELS CQ-2650EU/2500CEU



BATTERY LEAD (Connect to vehicle battery)
ACC POWER (+12V DC, negative ground only)
GROUND (Connect to a clean, bare metallic part of your vehicle)

Label
Exposed end (Open end)

TROUBLE	SOLUTION
	Vehicle battery. Ignition to On or Accessory.
	Connections. Fuse.
	Antenna.
	Stay from high power lines.
	Hold buttons for more seconds.
	Heads. (Ask a service representative for advice.) Poor quality tape.
	►►(FF) and ◄◄(REW) buttons the same time.
	Connections. CD•C button. Disc magazine.
	Disc properly. Disc for scratches, chips. Disc magazine.

SCHEMATIC DIAGRAM (Main Block) MODELS CQ-2650EU/2500CEU

E-4C149

	CQ-2650EU	CQ-2500CEU
R207, R307	150Ω	680Ω

(CQ-2650EU only)

AM/FM FE /MPX P50 YEAU4CMXU01

WEATHER BAND P10 YEAU034CSU02

CPU IC600 YEAM17708556

AF AMP Q301 YEAN2SC3330T

AF AMP Q201 YEAN2SC3330T

AF AMP Q10 YEAN2SC3330T

TONE AMP IC231 YEAMM5218AFE

MUTE GATE Q606 YEANC143TKT

MUTE GATE Q605 YEANC143TKT

TAPE EQ IC200 YEAMLA3161

MTL EQ Q302 YEAN2SC3330T

VT LPF Q401 YEAN2SK583T

MUTE Q630 YEANA114YST

MODE CONTROL Q631 YEANC114YST

MODE CONTROL Q633 YEANC114YST

MODE CONTROL Q632 YEANB123YST

POWER SWITCH Q706 YEANB123YST

POWER SWITCH Q707 YEANB123YST

POWER SWITCH Q708 YEANB123YST

10V REG Q710

EU

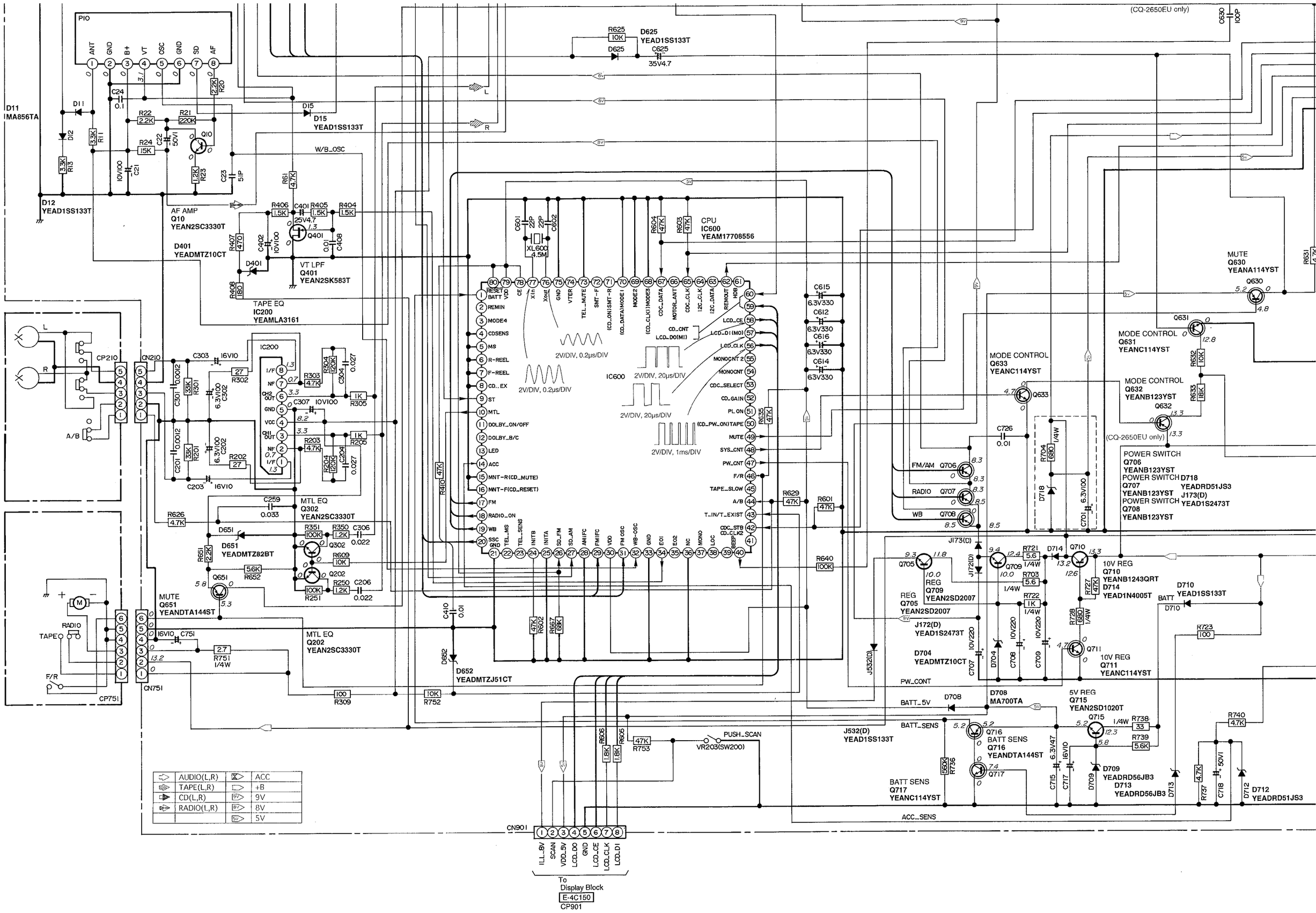
	CQ-2650EU	CQ-2500CEU
R207, R307	150Ω	680Ω

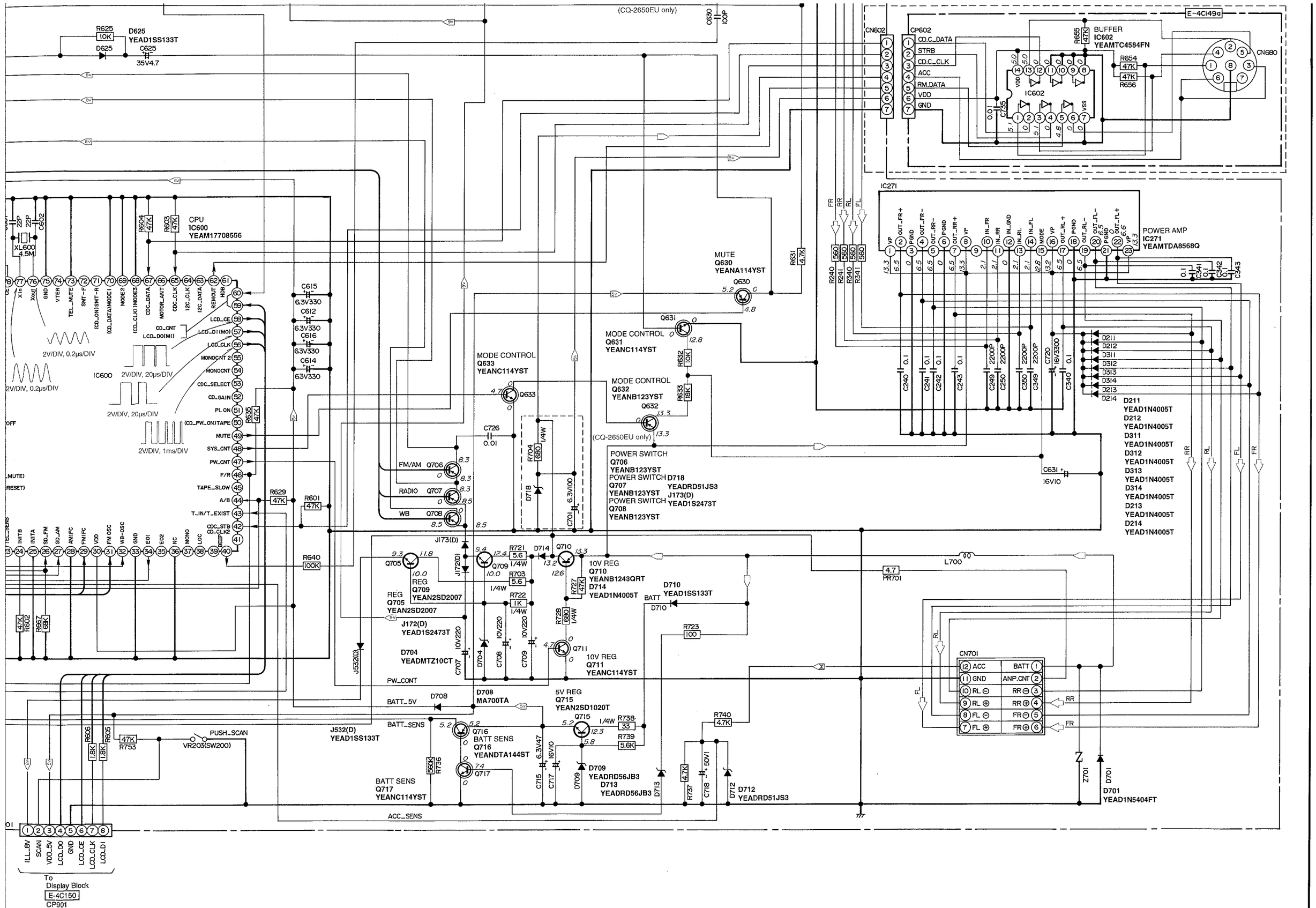
CN701 12P CONNECTOR

1. Power Supply, BATT ⊕	7. Front Speaker, Left ⊕
2. No Connection	8. Front Speaker, Left ⊖
3. Rear Speaker, Right ⊖	9. Rear Speaker, Left ⊕
4. Rear Speaker, Right ⊕	10. Rear Speaker, Left ⊖
5. Front Speaker, Right ⊖	11. Ground
6. Front Speaker, Right ⊕	12. Power Supply, ACC

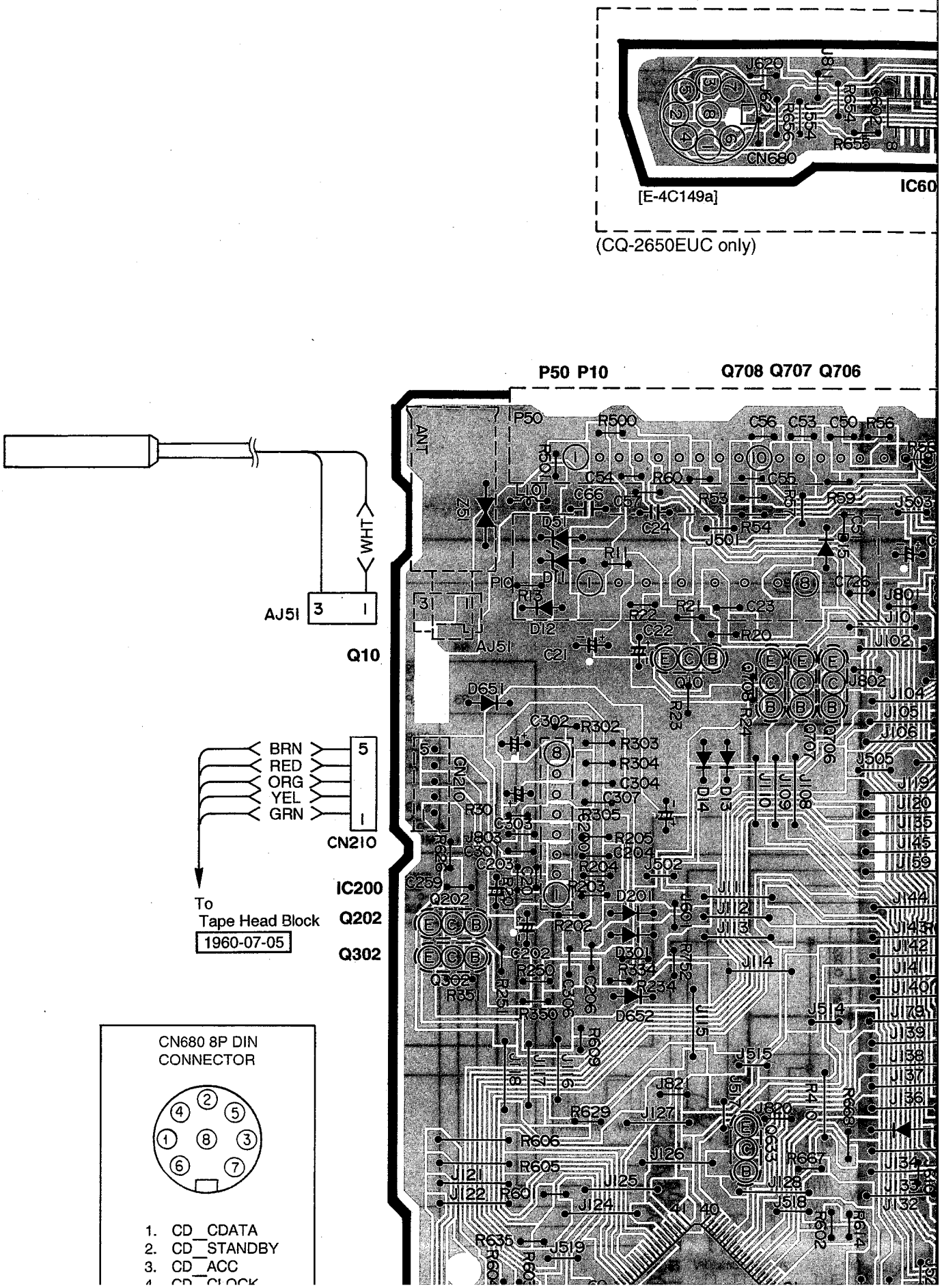
CN680 8P DIN CONNECTOR

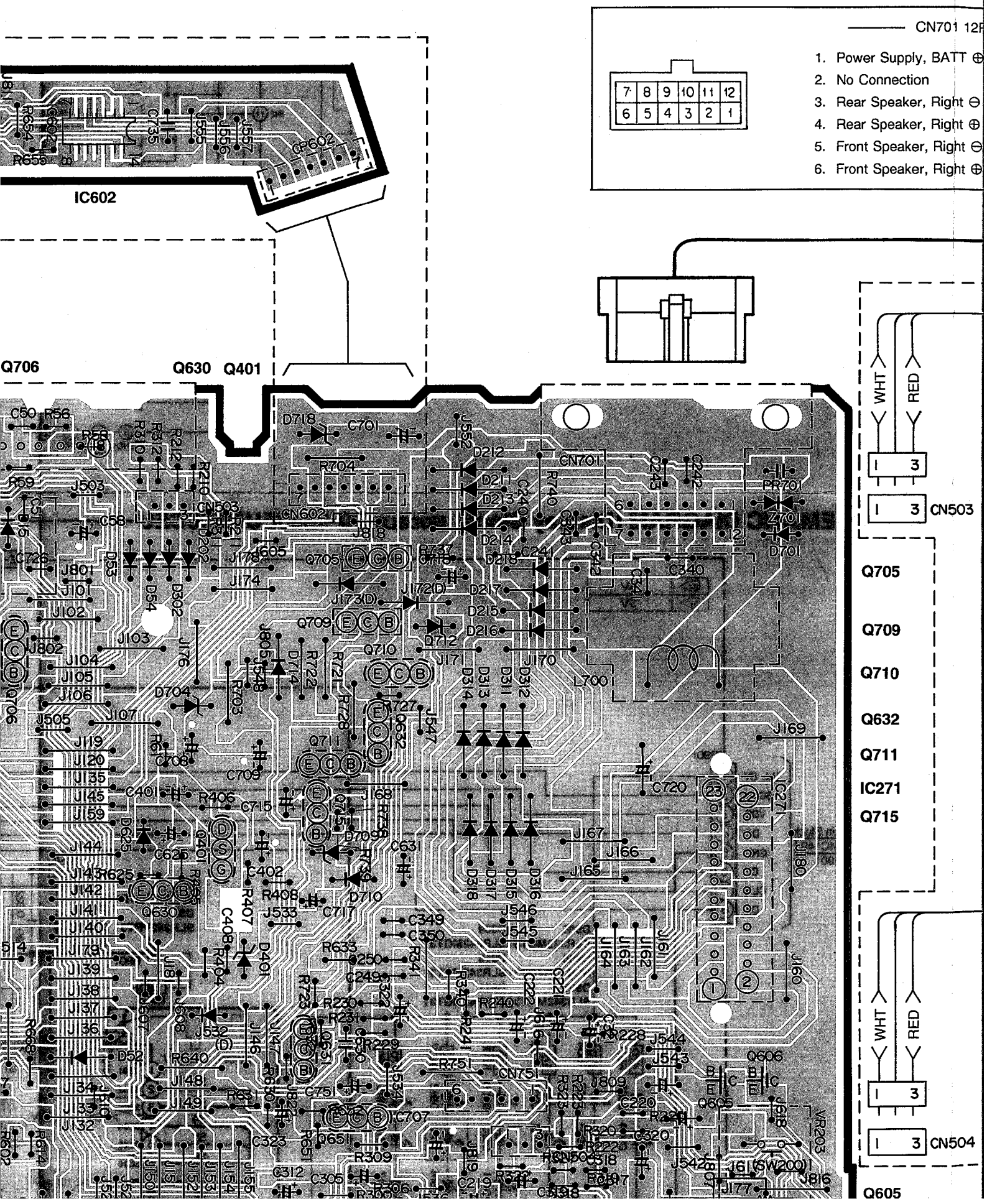
1. CD_CDATA	
2. CD_STANDBY	
3. CD_ACC	
4. CD_CLOCK	
5. CD_NW.DATA	
6. CD_ACC	
7. No Connection	
8. Ground	


PIO
ANT GND B+ VT OSC GND SD AF
D11 MA856TA
D12 YEAD1SS133T
D15 YEAD1SS133T
D625 YEAD1SS133T
AF AMP Q10 YEAN2SC3330T
D401 YEADMTZ10CT
VT LPF Q401 YEAN2SK583T
TAPE EQ IC200 YEAMLA3161
W/B_OSC
CPU IC600 YEAM17708556
XL600 4.5MJ
2V/DIV, 0.2µs/DIV
2V/DIV, 20µs/DIV
2V/DIV, 1ms/DIV
MTL EQ Q302 YEAN2SC3330T
MTL EQ Q202 YEAN2SC3330T
D651 YEADMTZ82BT
D652 YEADMTZJ51CT
MUTE Q651 YEANDTA144ST
MUTE Q630 YEANA114YST
MODE CONTROL Q631 YEANC114YST
MODE CONTROL Q632 YEANB123YST
MODE CONTROL Q633 YEANC114YST
(CQ-2650EU only)
POWER SWITCH Q706 YEANB123YST
POWER SWITCH Q707 YEANB123YST
POWER SWITCH D718 YEADRD51JS3
J173(D) YEAD1S2473T
Q708 YEANB123YST
10V REG Q710 YEANB1243QRT
D714 YEAD1N4005T
D710 YEAD1SS133T
10V REG Q711 YEANC114YST
5V REG Q715 YEAN2SD1020T
D708 MA700TA
D709 YEADRD56JB3
D713 YEADRD56JB3
D712 YEADRD51JS3
REG Q705 YEAN2SD2007
REG Q709 YEAN2SD2007
J172(D) YEAD1S2473T
D704 YEADMTZ10CT
J532(D) YEAD1SS133T
BATT SENS Q716 YEANDTA144ST
BATT SENS Q717 YEANC114YST
PUSH_SCAN
VR203(SW200)
AUDIO(L,R)
TAPE(L,R)
CD(L,R)
RADIO(L,R)
ACC
+B
9V
8V
5V
To Display Block E-4C150 CP901


R625 10K
D625 YEAD1SS133T
D625
C625 35V4.7
(CQ-2650EU only)
C630 100P
CN602
CP602
CD.C_DATA
STRB
CD.C_CLK
ACC
RM.DATA
VDD
GND
E-4C149a
BUFFER
IC602
YEAMTC4584FN
R655 47K
R654 47K
R656 47K
CN680
C735 0.01
XL600 4.5M
C601 22P
C602 22P
R604 47K
R603 47K
CPU
1C600
YEAM17708556
IC600
2V/DIV, 0.2µs/DIV
2V/DIV, 20µs/DIV
2V/DIV, 1ms/DIV
C615 6.3V330
C612 6.3V330
C616 6.3V330
C614 6.3V330
R635 47K
R629 47K
R601 47K
R640 100K
R602 47K
R667 68K
MUTE
Q630
YEANA114YST
R631 4.7K
R240 560
R241 560
R340 560
R341 560
FR
RR
RL
FL
IC271
POWER AMP
IC271
YEAMTDA8568Q
C240 0.1
C241 0.1
C242 0.1
C243 0.1
C249 2200P
C250 2200P
C350 2200P
C349 2200P
C720 16V3300
C340 0.1
C341 0.1
C342 0.1
C343 0.1
D211
D212
D311
D312
D313
D314
D213
D214
D211
YEAD1N4005T
D212
YEAD1N4005T
D311
YEAD1N4005T
D312
YEAD1N4005T
D313
YEAD1N4005T
D314
YEAD1N4005T
D213
YEAD1N4005T
D214
YEAD1N4005T
C631 16V10
MODE CONTROL
Q633
YEANC114YST
Q633
MODE CONTROL
Q631
YEANC114YST
Q631
R632 10K
MODE CONTROL
Q632
YEANB123YST
Q632
R633 18K
(CQ-2650EU only)
POWER SWITCH
Q706
YEANB123YST
POWER SWITCH
Q707
YEANB123YST
POWER SWITCH
Q708
YEANB123YST
D718
YEADRD51JS3
J173(D)
YEAD1S2473T
C726 0.01
R704 680 1/4W
D718
C701 6.3V100
FM/AM Q706
RADIO Q707
WB Q708
J173(D)
Q705
Q709
Q710
10V REG
Q710
YEANB1243QRT
D714
YEAD1N4005T
D710
YEAD1SS133T
BATT
D710
REG
Q709
YEAN2SD2007
REG
Q705
YEAN2SD2007
J172(D)
YEAD1S2473T
R721 5.6 1/4W
R722 1K 1/4W
R703 5.6 1/4W
R727 47K
R728 680 1/4W
R723 100
10V220
C707
D704
YEADMTZ10CT
D704
C708
C709
Q711
10V REG
Q711
YEANC114YST
PW_CONT
D708
MA700TA
D708
BATT_5V
5V REG
Q715
YEAN2SD1020T
Q715
R738 33
R739 5.6K
J532(D)
YEAD1SS133T
BATT_SENS
Q716
BATT SENS
Q716
YEANDTA144ST
Q717
BATT SENS
Q717
YEANC114YST
560K R736
C715 6.3V47
C717 16V10
D709
YEADRD56JB3
D713
YEADRD56JB3
D713
R740 4.7K
R737 4.7K
C718 50V1
D712
D712
YEADRD51JS3
ACC_SENS
L700
4.7
PR701
CN701
ACC
GND
RL
FL
BATT
ANP.CNT
RR
FR
Z701
D701
D701
YEAD1N5404FT
R606 1.8K
R605 1.8K
R753 47K
PUSH_SCAN
VR203(SW200)
To
Display Block
E-4C150
CP901
ILL_8V
SCAN
VDD_5V
LCD_DO
GND
LCD_CE
LCD_CLK
LCD_DI

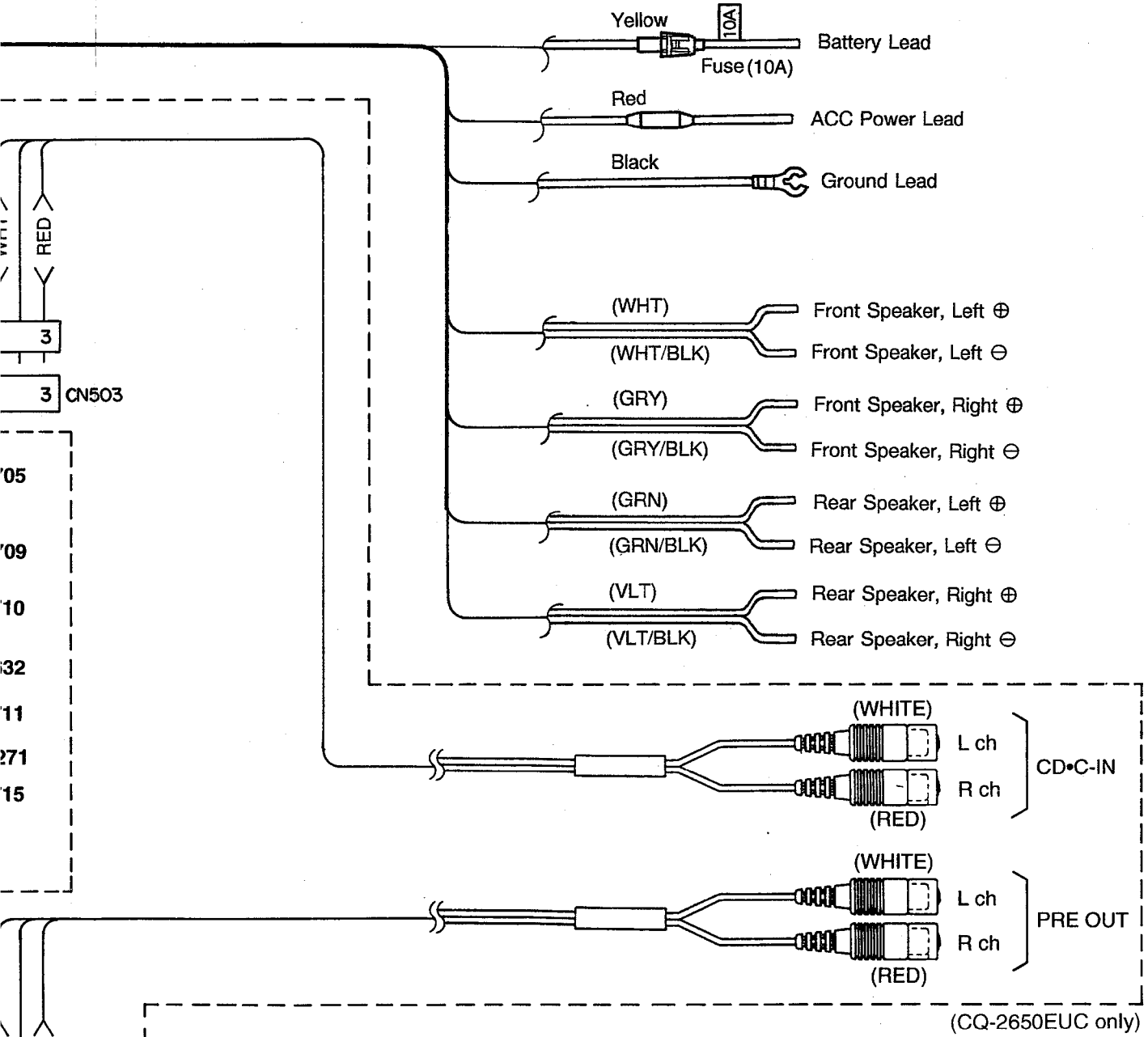
WIRING DIAGRAM (Main Block) MODELS CQ-2650EU/2500CEU



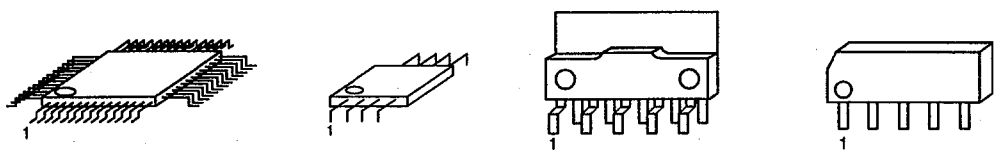

CN701 12P
1. Power Supply, BATT ⊕
2. No Connection
3. Rear Speaker, Right ⊖
4. Rear Speaker, Right ⊕
5. Front Speaker, Right ⊖
6. Front Speaker, Right ⊕
7 8 9 10 11 12
6 5 4 3 2 1
IC602
Q706
Q630
Q401
WHT
RED
CN503
CN504
Q705
Q709
Q710
Q632
Q711
IC271
Q715
Q605

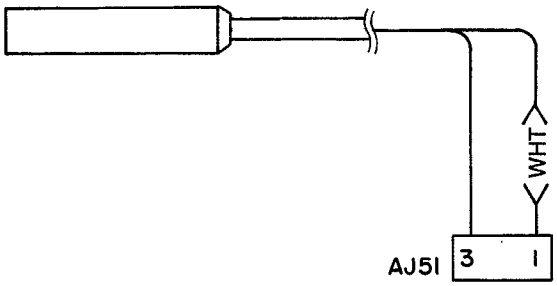
— CN701 12P CONNECTOR —

Supply, BATT ⊕	7. Front Speaker, Left ⊕
nnection	8. Front Speaker, Left ⊖
peaker, Right ⊖	9. Rear Speaker, Left ⊕
peaker, Right ⊕	10. Rear Speaker, Left ⊖
Speaker, Right ⊖	11. Ground
Speaker, Right ⊕	12. Power Supply, ACC

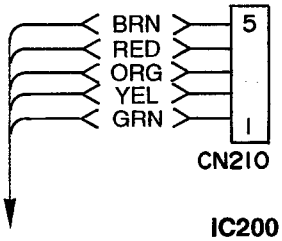


ICs & Transistors





Q10



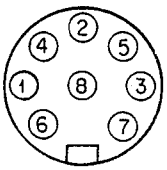
IC200

To
Tape Head Block
1960-07-05

Q202

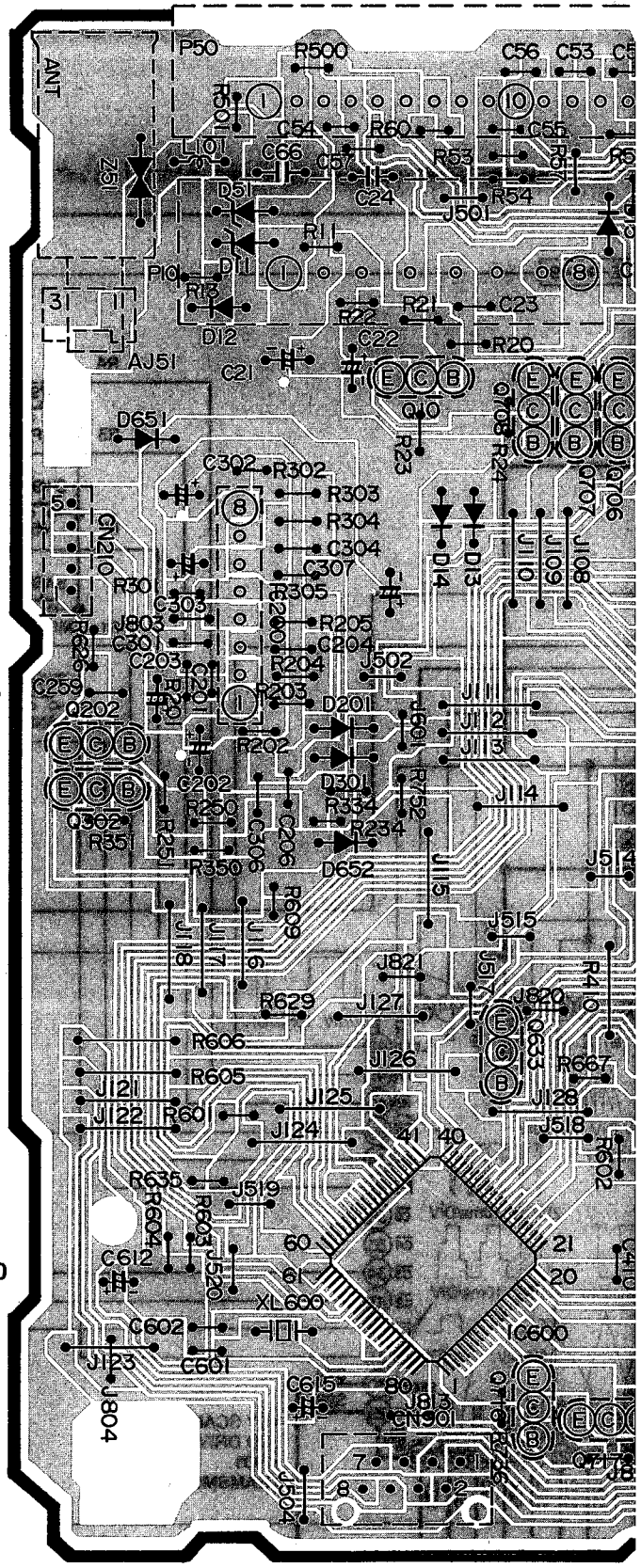
Q302

CN680 8P DIN
CONNECTOR



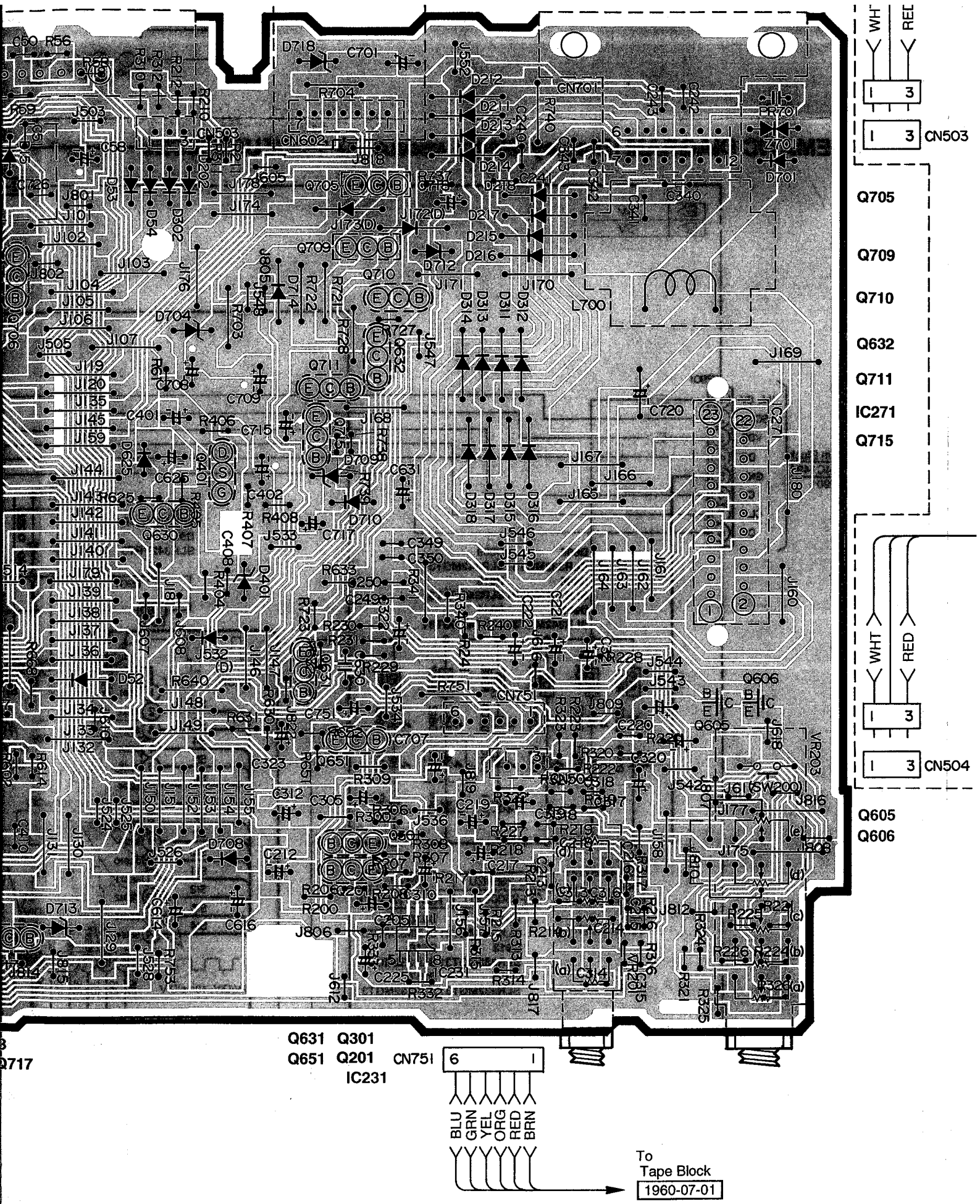
1. CD_CDATA
2. CD_STANDBY
3. CD_ACC
4. CD_CLOCK
5. CD_NW.DATA
6. CD_ACC
7. No Connection
8. Ground

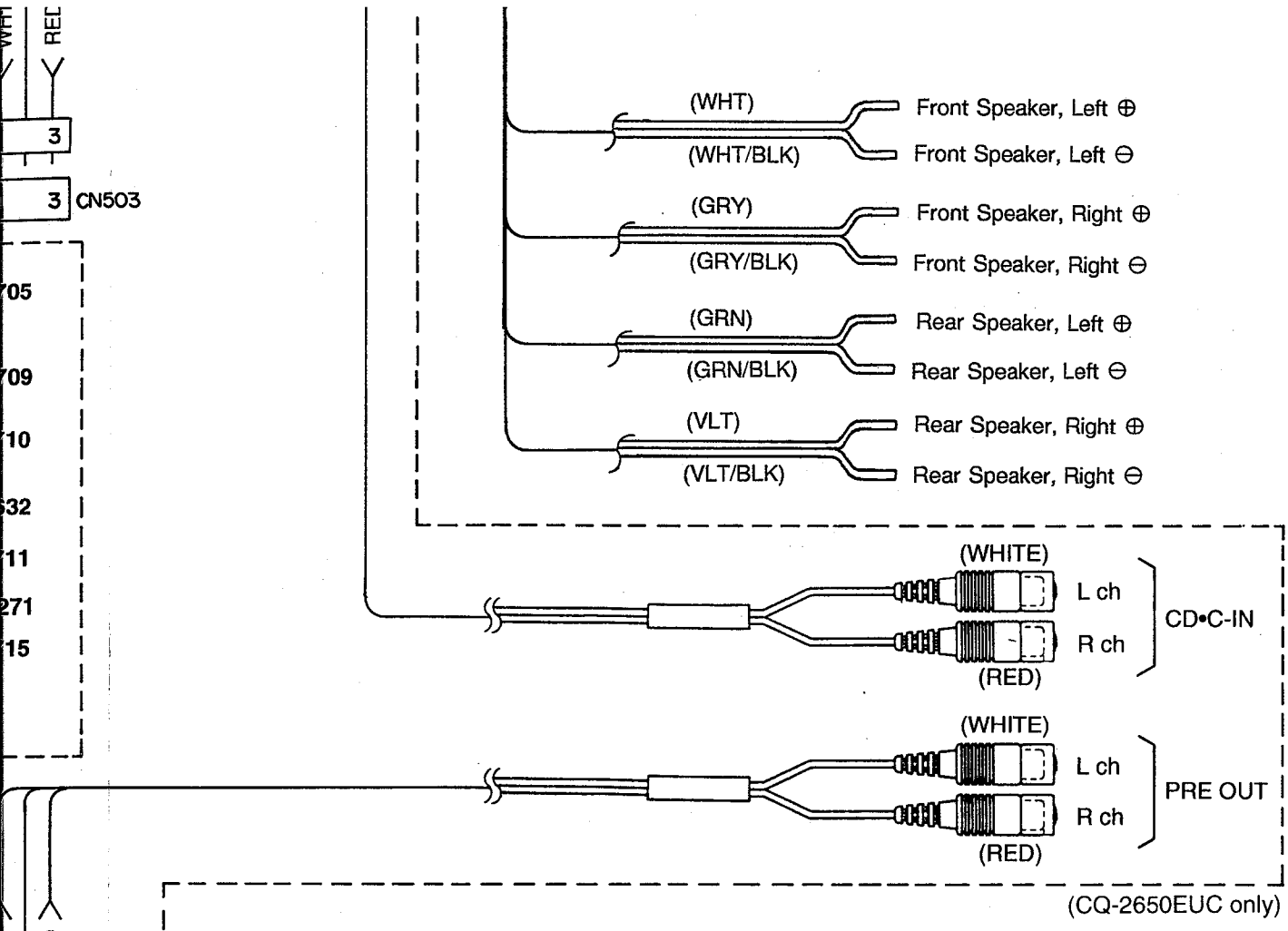
IC600



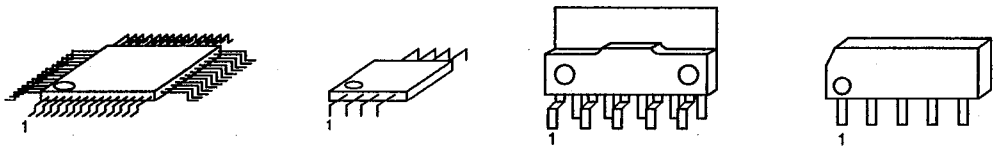
[E-4C149]

To
Display Block
E-4C150


WHT
RED
1 3
CN503
Q705
Q709
Q710
Q632
Q711
IC271
Q715
WHT
RED
1 3
CN504
Q605
Q606
Q631 Q301
Q651 Q201 CN751 6 1
IC231
BLU
GRN
YEL
ORG
RED
BRN
To
Tape Block
1960-07-01



ICs & Transistors

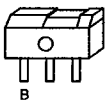


IC600	80PIN

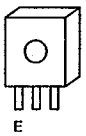
IC231	8PIN

IC271	23PIN

IC200	8PIN

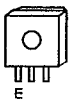


• Q710



• Q705
Q709

• Q605
Q606



•Other Transistors

TERMINALS DESCRIPTION (Display Block)

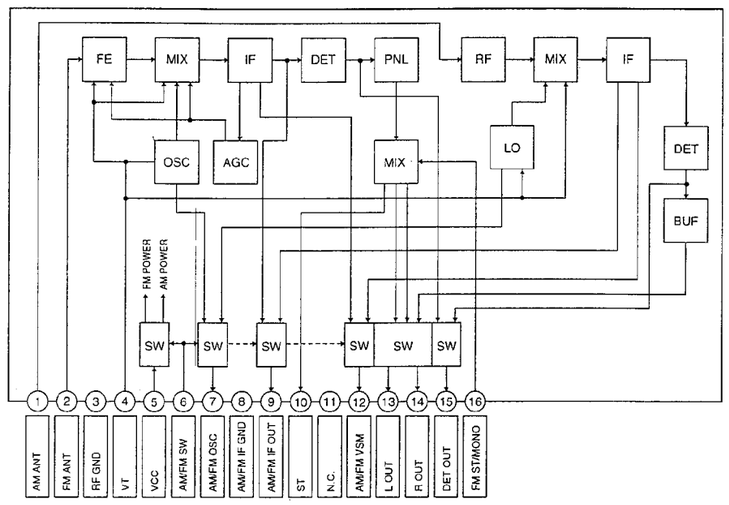
■IC901 YEAMSM6786Q

Pin No.	Name	Description	I / O	Vol.(V)
1	SEG1 (NC)	—	—	—
2	SEG2	LCD segment data 2	O	2.6
3	SEG3	LCD segment data 3	O	2.6
4	SEG4	LCD segment data 4	O	2.6
5	SEG5	LCD segment data 5	O	2.6
6	SEG6	LCD segment data 6	O	2.6
7	SEG7	LCD segment data 7	O	2.6
8	SEG8	LCD segment data 8	O	2.6
9	SEG9	LCD segment data 9	O	2.6
10	SEG10	LCD segment data 10	O	2.6
11	SEG11	LCD segment data 11	O	2.6
12	SEG12	LCD segment data 12	O	2.6
13	SEG13	LCD segment data 13	O	2.6
14	SEG14	LCD segment data 14	O	2.6
15	SEG15	LCD segment data 15	O	2.6
16	SEG16	LCD segment data 16	O	2.6
17	SEG17	LCD segment data 17	O	2.6
18	SEG18	LCD segment data 18	O	2.6
19	SEG19	LCD segment data 19	O	2.6
20	SEG20	LCD segment data 20	O	2.6
21	VDD2	+5V Power Supply	—	5.2
22	SEG21	LCD segment data 21	O	2.6
23	SEG22	LCD segment data 22	O	2.6
24	SEG23	LCD segment data 23	O	2.6
25	SEG24	LCD segment data 24	O	2.6
26	SEG25	LCD segment data 25	O	2.6
27	SEG26	LCD segment data 26	O	2.6
28	SEG27	LCD segment data 27	O	2.6

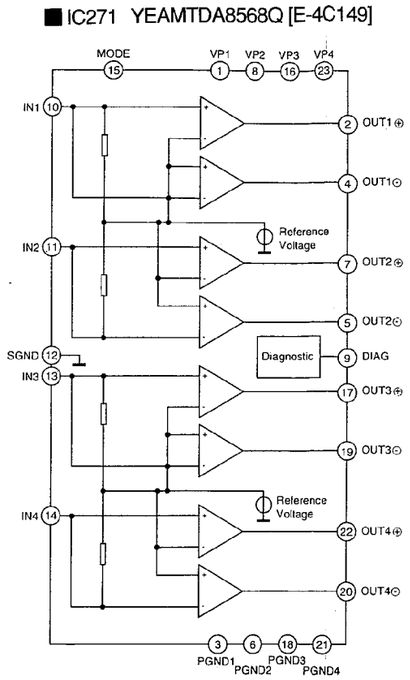
Pin No.	Name	Description	I / O	Vol.(V)
29	SEG28	LCD segment data 28	O	2.6
30	SEG29	LCD segment data 29	O	2.6
31	C0	Key Control 0	O	5.2
32	C1	Key Control 1	O	5.2
33	C2	Key Control 2	O	5.2
34	C3	Key Control 3	O	5.2
35	C4 (NC)	—	—	—
36	C5 (NC)	—	—	—
37	R0	Key Return 0	I	4.2
38	R1	Key Return 1	I	4.2
39	R2	Key Return 2	I	4.2
40	R3	Key Return 3	I	4.2
41	R4	Key Return 4	I	4.2
42	LOAD	LCD LSI Chip Enable	I	0
43	CLK	LCD Clock	I	0
44	DI	LCD Data Input	I	0
45	INT	LCD Data Output	O	4.2
46	RESET	Reset	I	4.0
47	LED	LED Control	O	4.3
48	3/4 SEL	(+5v Pull-up)	—	4.4
49	VDD1	+5v Power Supply	—	4.4
50	OSC	CR Oscillator	—	2.2
51	VSS	Ground	—	0
52	TEST	(Connecting to ground)	—	0
53	COM4 (NC)	—	—	—
54	COM3	LCD Common 3	O	2.2
55	COM2	LCD Common 2	O	2.2
56	COM1	LCD Common 1	O	2.2

PACKAGE AND IC BLOCK DIAGRAMS

■ P50 YEAU4CMXU01 [E-4C149]



■ IC271 YEAMTDA8568Q [E-4C149]



ALIGNMENT INSTRUCTIONS

1. HEAD HEIGHT ALIGNMENT

Step	Alignment Item	Test Tape	Adjust	Remarks
①	Head Height	Tape path viewer (With mirror)	Head Mounting screws (Right and Left)	• Temporarily tighten the Head mounting screws (Right and Left) to the position shown Figure 1. • Insert the Test Tape into the set, and press the play button (Keep power off). • Adjust the height to the Head to be as shown in Figure 2 as viewed in front of the mirror, using the Head mounting screws.

Note : • Test Tape No. : QZZCRD
• Make sure that the head cores are even top and bottom.

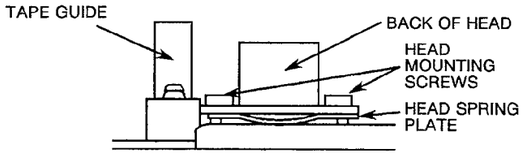


Fig. 1

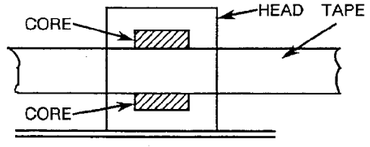
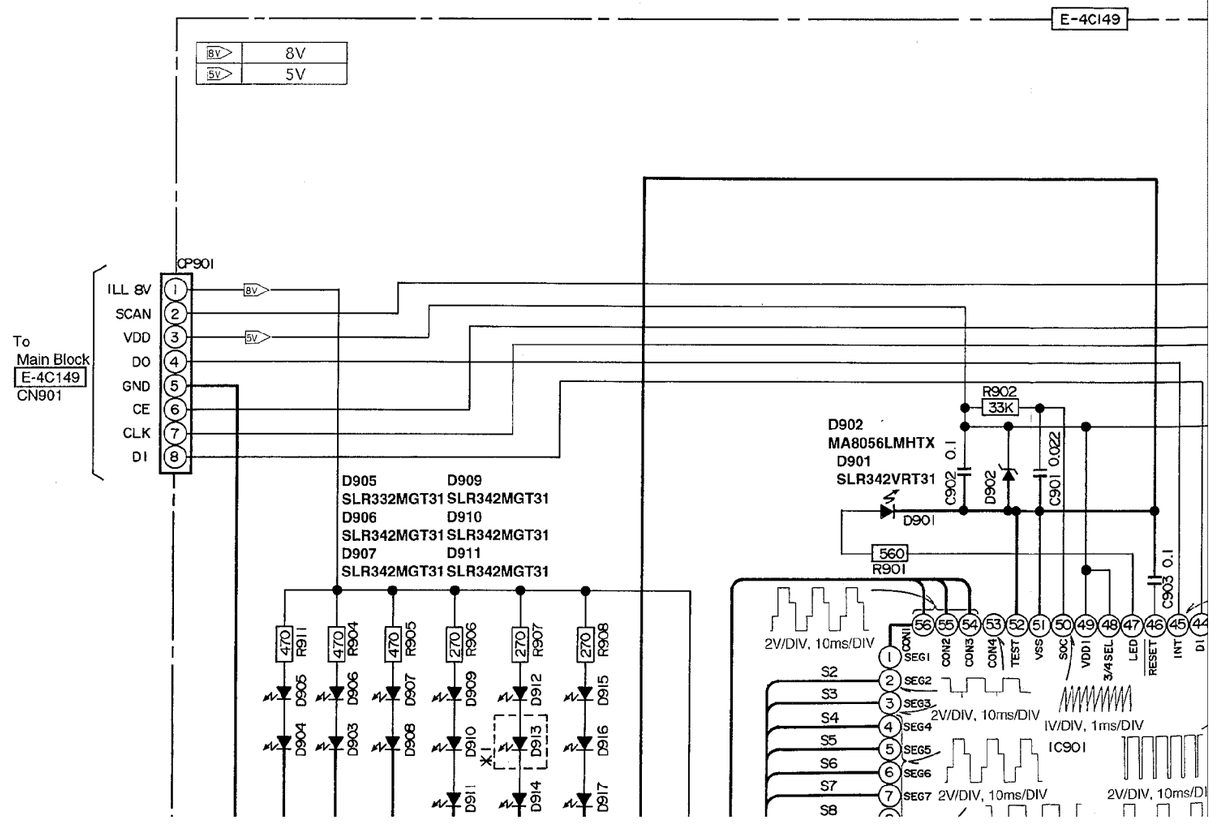


Fig. 2

2. HEAD AZIMUTH ALIGNMENT

Step	Alignment Item	Test Tape	Input Terminal	VM Connection	Adjust	Remarks
②	Head Azimuth	TCC-153	Playback Head	Speaker Terminals	Head Azimuth Adjustment Screw	• Adjust for maximum output. • Use ⊕ Screw driver.

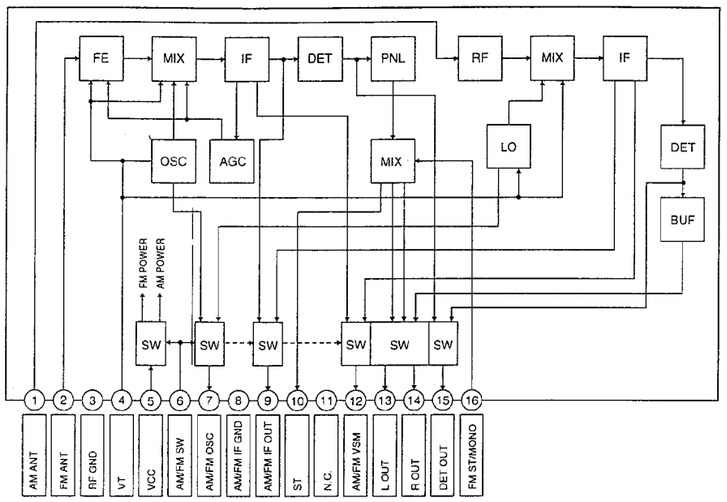
SCHEMATIC DIAGRAM (Display Block) MODELS CQ-2650EU/2500CEU



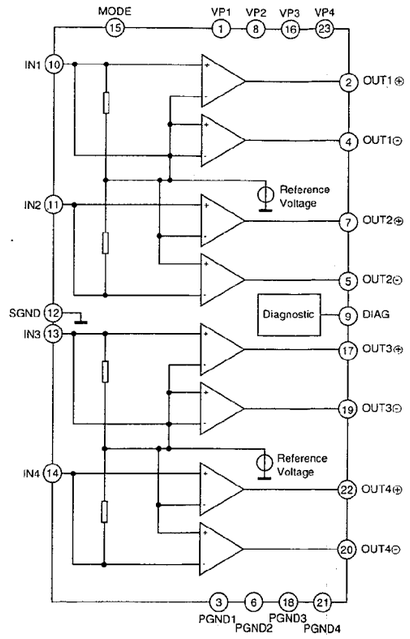
PACKAGE AND IC BLOCK DIAGRAMS

Vol.(V)
2.6
2.6
5.2
5.2
5.2
5.2
—
—
4.2
4.2
4.2
4.2
4.2
0
0
0
4.2
4.0
4.3
4.4
4.4
2.2
0
0
—
2.2
2.2
2.2

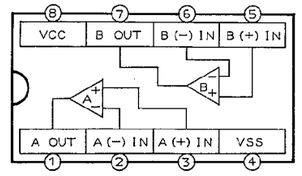
■ P50 YEAU4CMXU01 [E-4C149]



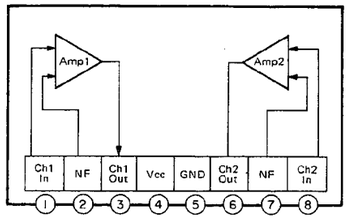
■ IC271 YEAMTDA8568Q [E-4C149]



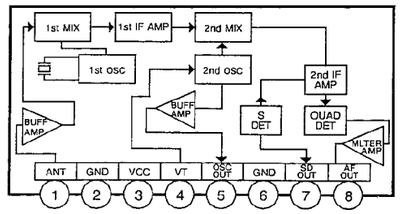
■ IC231 YEAMM5218AFE [E-4C149]



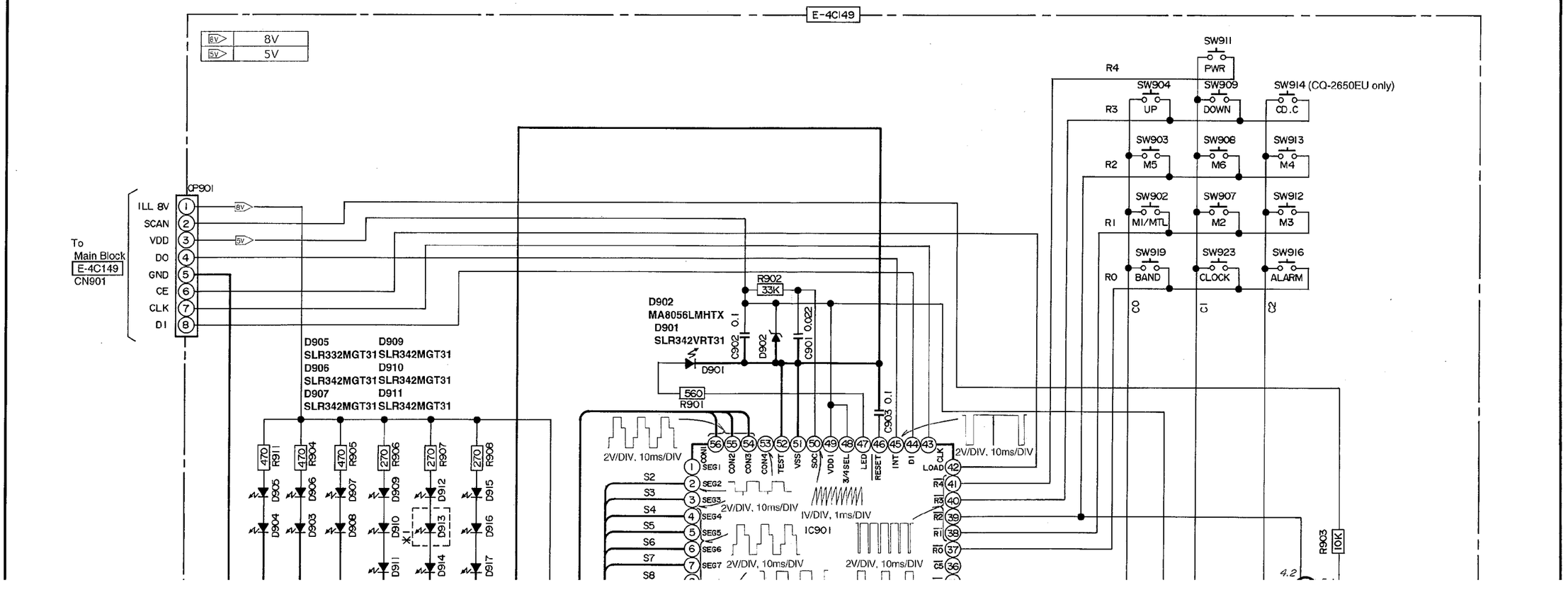
■ IC200 YEAMLA3161 [E-4C149]



■ P10 YEAU034CSU02 [E-4C149]



SCHEMATIC DIAGRAM (Display Block) MODELS CQ-2650EU/2500CEU



26	SEG25	LCD segment data 25	O	2.6	54	COM3	LCD Common 3	O	2.2
27	SEG26	LCD segment data 26	O	2.6	55	COM2	LCD Common 2	O	2.2
28	SEG27	LCD segment data 27	O	2.6	56	COM1	LCD Common 1	O	2.2

ALIGNMENT INSTRUCTIONS

1. HEAD HEIGHT ALIGNMENT

Step	Alignment Item	Test Tape	Adjust	Remarks
①	Head Height	Tape path viewer (With mirror)	Head Mounting screws (Right and Left)	• Temporarily tighten the Head mounting screws (Right and Left) to the position shown Figure 1. • Insert the Test Tape into the set, and press the play button (Keep power off). • Adjust the height to the Head to be as shown in Figure 2 as viewed in front of the mirror, using the Head mounting screws.

Note : • Test Tape No. : QZZCRD
• Make sure that the head cores are even top and bottom.

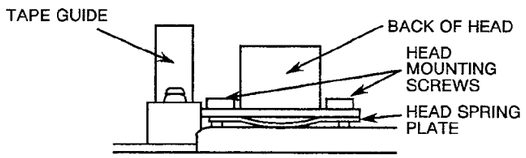


Fig. 1

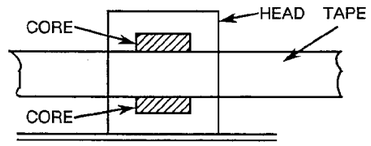
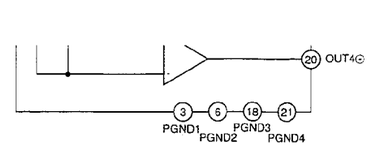


Fig. 2

2. HEAD AZIMUTH ALIGNMENT

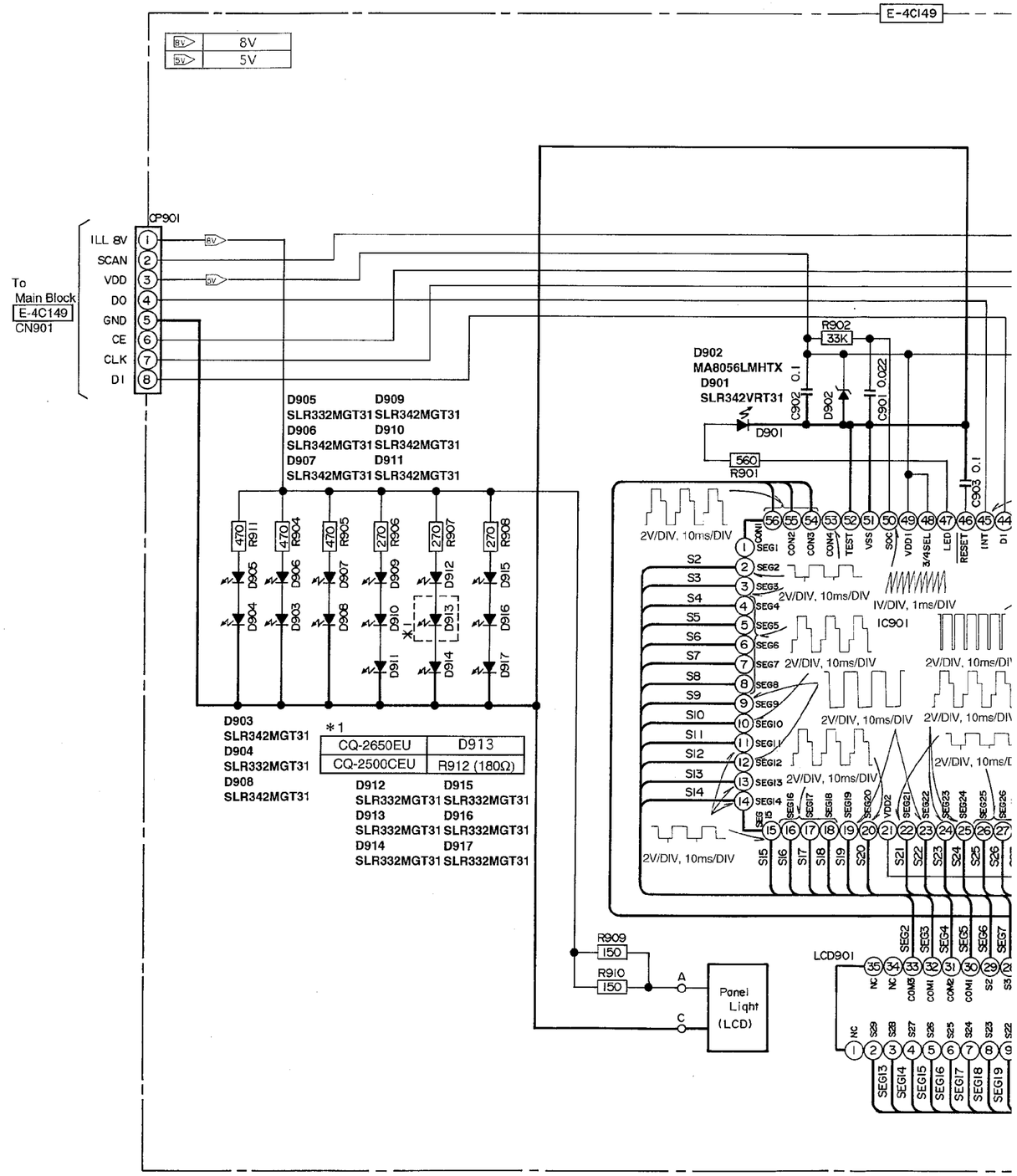
Step	Alignment Item	Test Tape	Input Terminal	VM Connection	Adjust	Remarks
②	Head Azimuth	TCC-153	Playback Head	Speaker Terminals	Head Azimuth Adjustment Screw	• Adjust for maximum output. • Use ⊕ Screw driver.

Note : If you do not have a test tape, use a tape whose recording level is more than 6 kHz for head adjustment.
After the above adjustment apply bonding agent to the adjustment screw.

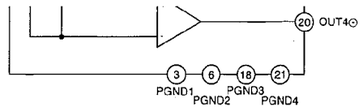


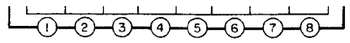
L

SCHEMATIC DIAGRAM (Display Block) MODELS CQ-2650EU/2500CEU

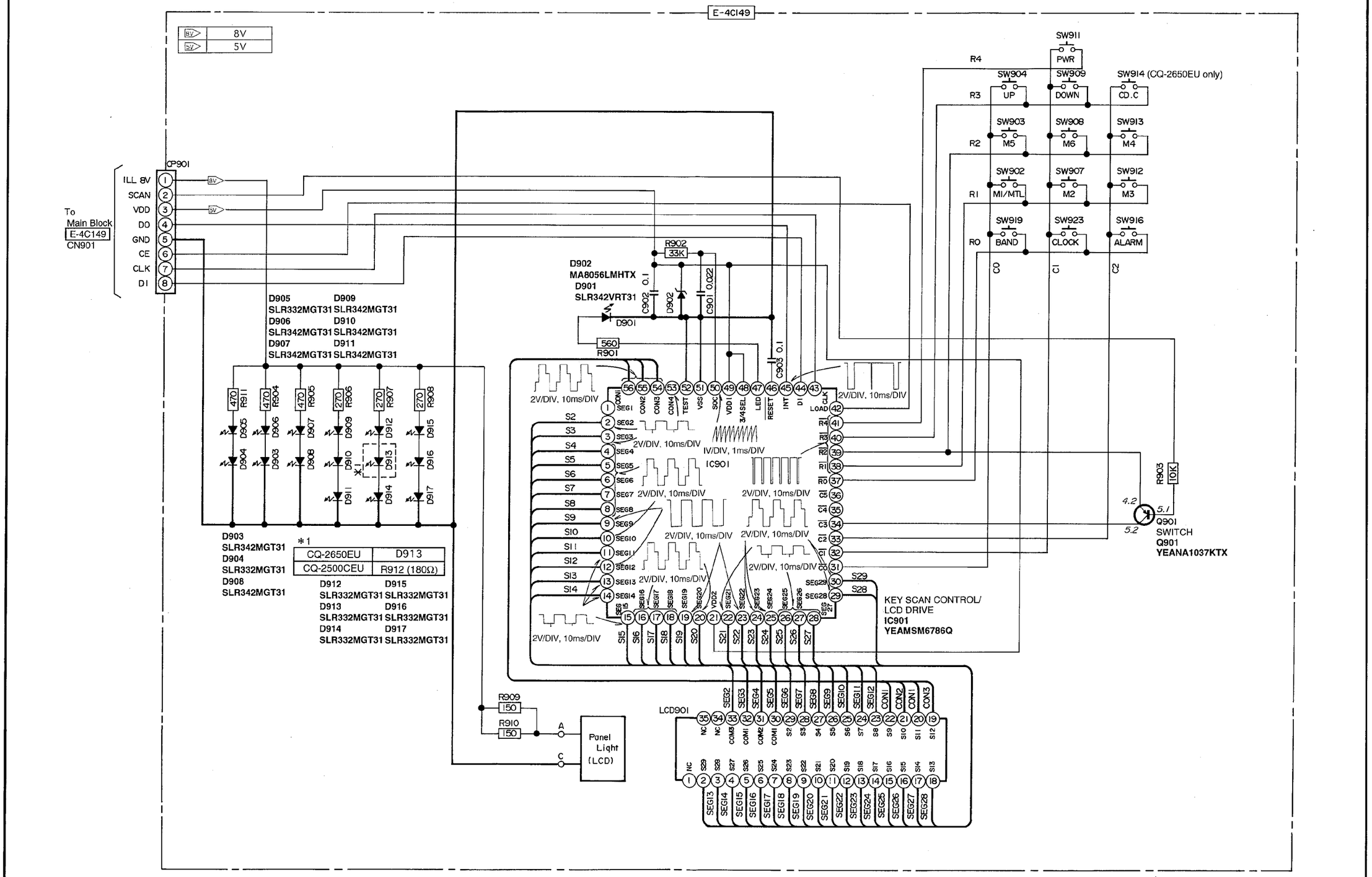


Hea

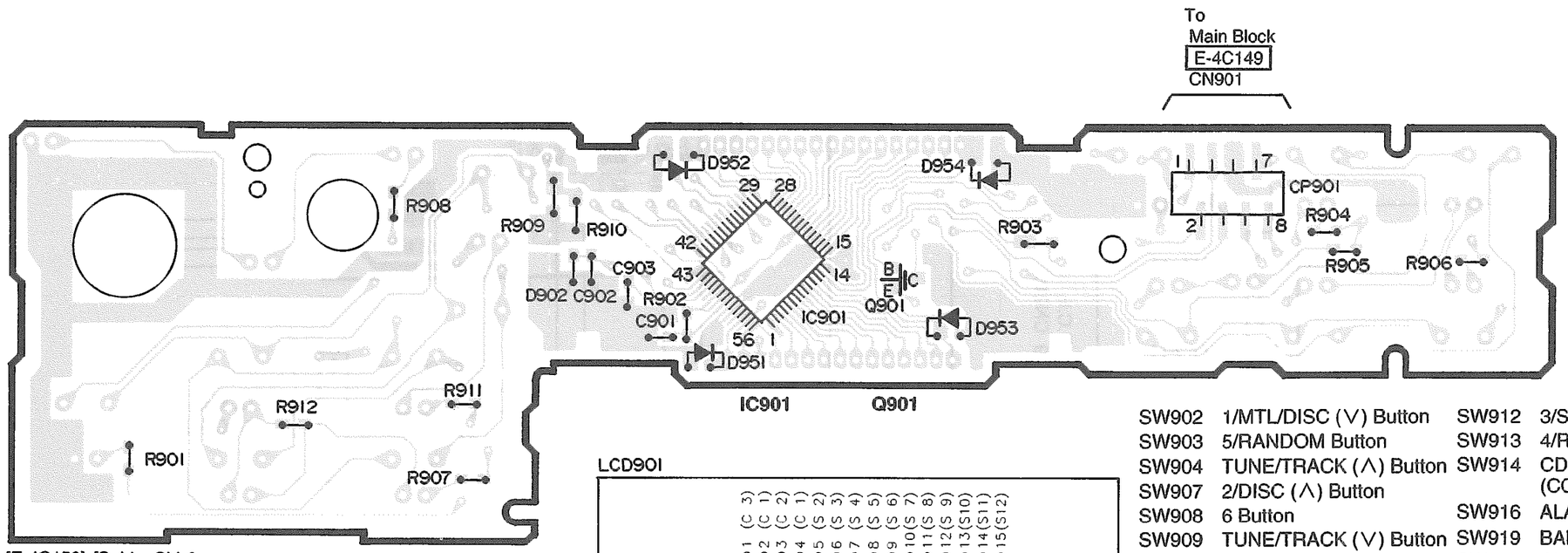




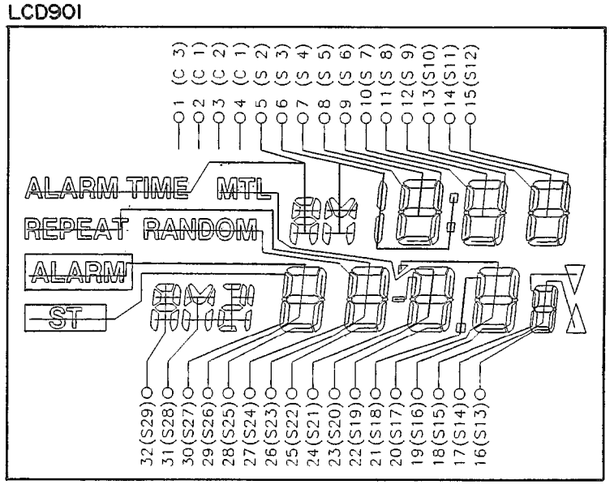
SCHEMATIC DIAGRAM (Display Block) MODELS CQ-2650EU/2500CEU



WIRING DIAGRAM (Display Block) MODELS CQ-2650EU/2500CEU

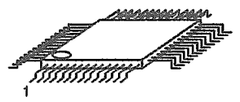


[E-4C150] [Solder Side]



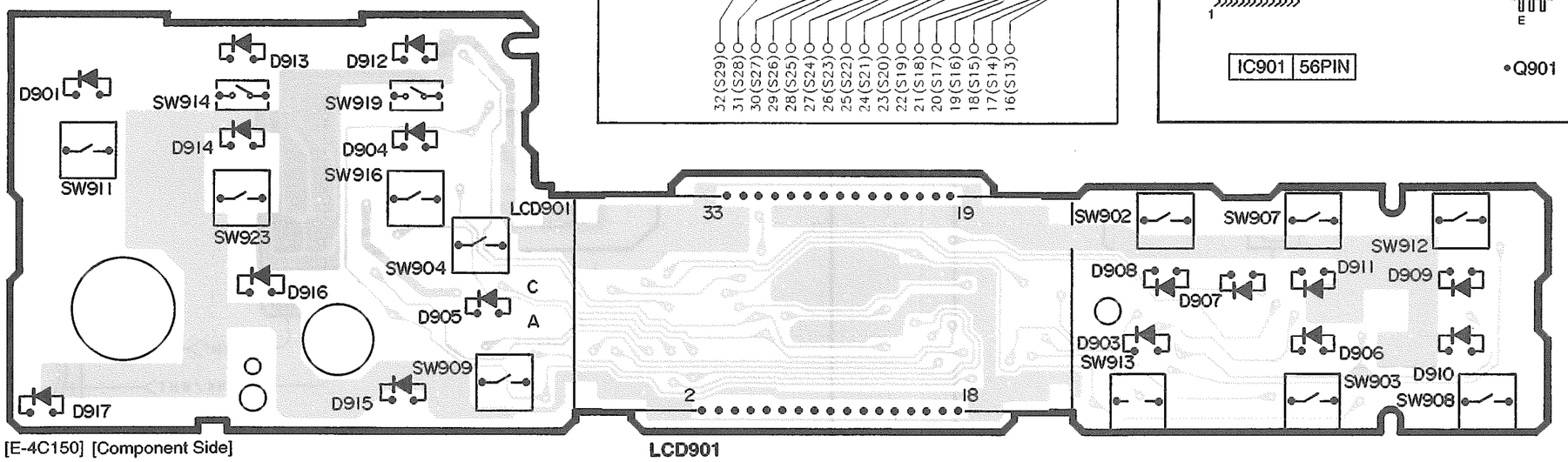
SW902	1/MTL/DISC (∨) Button	SW912	3/SCAN Button
SW903	5/RANDOM Button	SW913	4/REPEAT Button
SW904	TUNE/TRACK (∧) Button	SW914	CD • C Button (CQ-2650EU only)
SW907	2/DISC (∧) Button		
SW908	6 Button	SW916	ALARM Button
SW909	TUNE/TRACK (∨) Button	SW919	BAND/AUTO PRESET Button
SW911	Power Switch	SW923	CLOCK Button

IC & Transistor



IC901	56PIN

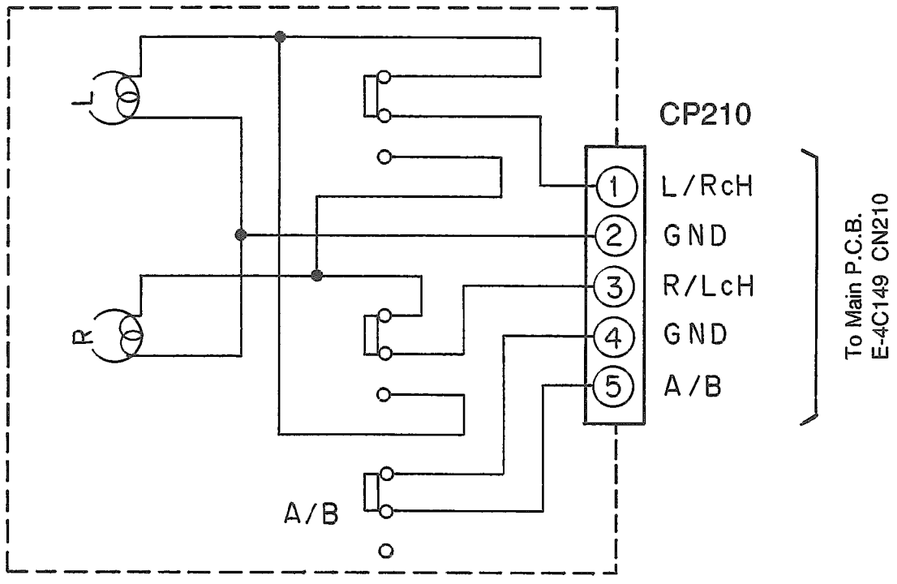
•Q901

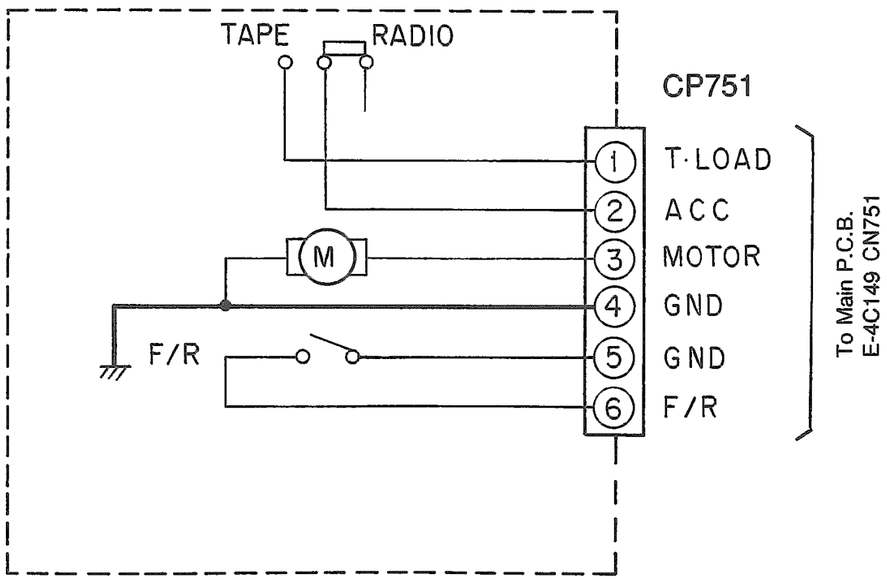


[E-4C150] [Component Side]

LCD901

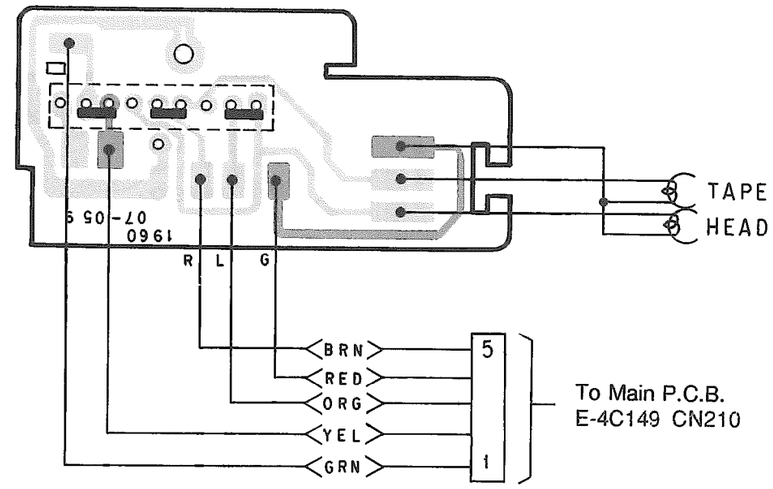
SCHEMATIC DIAGRAM (Tape Block) MODELS CQ-2650EU/2500CEU

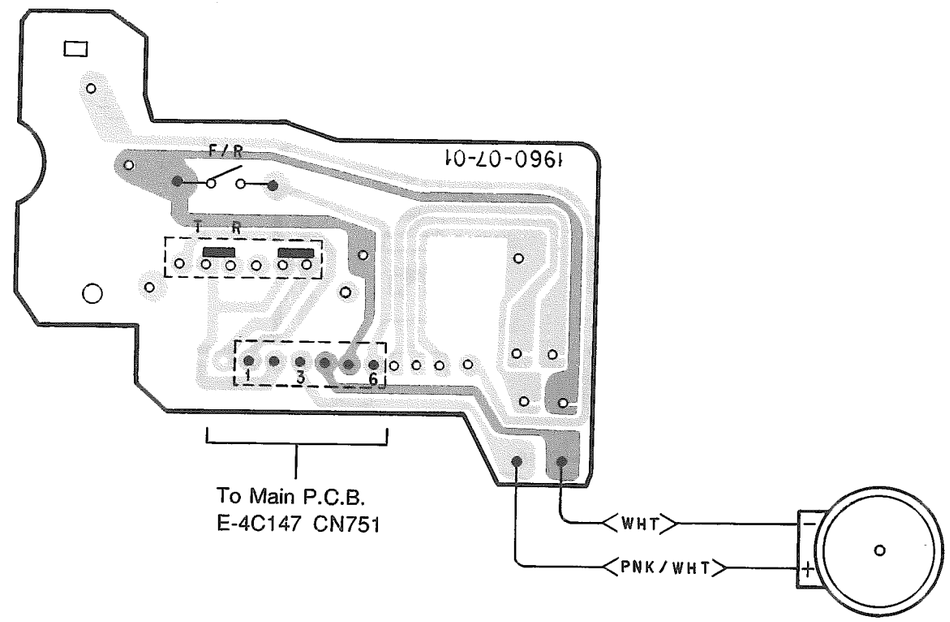




Heavy Duty Cassette/Weatherband Receiver with Changer Control

WIRING DIAGRAM (Tape Block) MODELS CQ-2650EU/2500CEU





Heavy Duty Cassette/Weatherband Receiver with Changer Control

1 Replacement Parts List

Note:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a load map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
5. "T" marks in remarks column are indicated supply parts of TAMACO.

1.1. IC's and Transistors

MAIN BLOCK [E-4C149]

Ref. No.	Part No.	Part Name & Description	Remarks
IC200	YEAMLA3161	IC	
IC231	YEAMM5218AFE	IC	
IC271	YEAMTDA8568Q	IC	
IC600	YEAM17708556	IC	T
IC602	YEAMTC4584FN	IC(CQ-2650EU)	T
P10	YEAU034CSU02	WB Tuner Pack	T
P50	YEAU4CMXU01	AM/FM Tuner Pack	T
Q10	YEAN2SC3330T	Transistor	T
Q201	YEAN2SC3330T	Transistor	T
Q202	YEAN2SC3330T	Transistor	T
Q301	YEAN2SC3330T	Transistor	T
Q302	YEAN2SC3330T	Transistor	T
Q401	YEAN2SK583T	Transistor	T
Q605	YEANC143TKT	Transistor	
Q606	YEANC143TKT	Transistor	
Q630	YEANA114YST	Transistor	T
Q631	YEANC114YST	Transistor	
Q632	YEANB123YST	Transistor	
Q633	YEANC114YST	Transistor	
Q651	YEANDTA144ST	Transistor	
Q705	YEAN2SD2007	Transistor	
Q706	YEANB123YST	Transistor	
Q707	YEANB123YST	Transistor	
Q708	YEANB123YST	Transistor	
Q709	YEAN2SD2007	Transistor	
Q710	YEANB1243QRT	Transistor	
Q711	YEANC114YST	Transistor	
Q715	YEAN2SD1020T	Transistor	
Q716	YEANDTA144ST	Transistor	
Q717	YEANC114YST	Transistor	

DISPLAY BLOCK [E-4C150]

Ref. No.	Part No.	Part Name & Description	Remarks
IC901	YEAMSM6786Q	IC	T
Q901	YEANA1037KTX	Transistor	

1.2. Diodes

MAIN BLOCK [E-4C149]

Ref. No.	Part No.	Part Name & Description	Remarks
D11	MA856TA	Diode	
D12	YEAD1SS133T	Diode	
D13	YEAD1SS133T	Diode	
D14	YEAD1SS133T	Diode	
D15	YEAD1SS133T	Diode	
D51	MA856TA	Diode	
D52	YEAD1S2473T	Diode	T
D53	YEAD1SS133T	Diode	
D54	YEAD1SS133T	Diode	
D201	YEAD1SS133T	Diode	
D202	MA700TA	Diode(CQ-2650EU)	T
D211	YEAD1N4005T	Diode	T
D212	YEAD1N4005T	Diode	T
D213	YEAD1N4005T	Diode	T
D214	YEAD1N4005T	Diode	T
D301	YEAD1SS133T	Diode	
D302	MA700TA	Diode(CQ-2650EU)	T
D311	YEAD1N4005T	Diode	T
D312	YEAD1N4005T	Diode	T
D313	YEAD1N4005T	Diode	T
D314	YEAD1N4005T	Diode	T
D401	YEADMTZ10CT	Zener Diode	T
D625	YEAD1SS133T	Diode	
D651	YEADMTZ82BT	Zener Diode	T
D652	YEADMTZJ51CT	Zener Diode	T
D701	YEAD1N5404FT	Diode	T
D704	YEADMTZ10CT	Zener Diode	T
D708	MA700TA	Diode	T
D709	YEADRD56JB3	Zener Diode	
D710	YEAD1SS133T	Diode	
D712	YEADRD51JS3	Zener Diode	
D713	YEADRD56JB3	Zener Diode	
D714	YEAD1N4005T	Diode	T
D718	YEADRD51JS3	Zener Diode(CQ-2650EU)	
J172(D)	YEAD1S2473T	Diode	T
J173(D)	YEAD1S2473T	Diode	T
J532(D)	YEAD1SS133T	Diode	

DISPLAY BLOCK [E-4C150]

Ref. No.	Part No.	Part Name & Description	Remarks
D902	MA8056LMHTX	Zener Diode	
D901	SLR342VRT31	LED(RED)	T
D903	SLR342MGT31	LED(GREEN)	T
D904	SLR332MGT31	LED(GREEN)	T
D905	SLR332MGT31	LED(GREEN)	T
D906	SLR342MGT31	LED(GREEN)	T
D907	SLR342MGT31	LED(GREEN)	T
D908	SLR342MGT31	LED(GREEN)	T
D909	SLR342MGT31	LED(GREEN)	T
D910	SLR342MGT31	LED(GREEN)	T
D911	SLR342MGT31	LED(GREEN)	T
D912	SLR332MGT31	LED(GREEN)	T
D913	SLR332MGT31	LED(GREEN)(CQ-2650EU)	T
D914	SLR332MGT31	LED(GREEN)	T
D915	SLR332MGT31	LED(GREEN)	T
D916	SLR332MGT31	LED(GREEN)	T
D917	SLR332MGT31	LED(GREEN)	T

1.3. Capacitors

MAIN BLOCK [E-4C149]

Ref. No.	Part No.	Part Name & Description	Remarks
C21	ECEA1AKS101	Electrolytic, 100µF 10WV	
C22	ECEA1HKS010B	Electrolytic, 1µF 50WV	
C23	ECUV1H510JCN	Ceramic, 51pF 50WV	T
C24	ECFL1C104KDY	Ceramic, 0.1µF 16WV	T
C50	ECUV1H333KBN	Ceramic, 0.033µF 50WV	T
C51	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C53	ECUV1H333KBN	Ceramic, 0.033µF 50WV	T
C54	ECUV1C224ZFN	Ceramic, 0.22µF 16WV	T
C55	ECUV1H103KBN	Ceramic, 0.01µF 50WV	T
C56	ECUV1H103KBN	Ceramic, 0.01µF 50WV	T
C57	ECUV1H103KBN	Ceramic, 0.01µF 50WV	T
C58	ECEA1CKS470I	Electrolytic, 47µF 16WV	
C66	ECKL1H103ZF	Ceramic, 0.01µF 50WV	T
C201	ECUV1H122KBN	Ceramic, 0.0012µF 50WV	T
C202	ECEA0JKS101	Electrolytic, 100µF 6.3WV	
C203	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C204	ECUV1H273KBN	Ceramic, 0.027µF 50WV	T
C205	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C206	ECUV1H223KBM	Ceramic, 0.022µF 50WV	T
C212	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C213	ECUV1H223KBN	Ceramic, 0.022µF 50WV	T
C214	ECUV1H102KBN	Ceramic, 0.001µF 50WV	T
C215	ECUV1H331KBN	Ceramic, 330pF 50WV	T
C216	ECUV1H223KBN	Ceramic, 0.022µF 50WV	T
C217	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C218	ECUV1H472KBN	Ceramic, 0.0047µF 50WV	
C219	ECEA1HKSR47I	Electrolytic, 0.47µF 50WV	
C220	ECEA1EKS3R3B	3.3µF 25WV(CQ-2650EU)	
C221	ECEA1EKS3R3B	Electrolytic, 3.3µF 25WV	
C222	ECEA1EKS3R3B	Electrolytic, 3.3µF 25WV	
C225	ECEA1AKS470I	Electrolytic, 47µF 10WV	
C240	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C241	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C242	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C243	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C249	ECUV1H222KBN	Ceramic, 0.0022µF 50WV	T
C250	ECUV1H222KBN	Ceramic, 0.0022µF 50WV	T
C259	ECUV1H333KBN	Ceramic, 0.033µF 50WV	T
C301	ECUV1H122KBN	Ceramic, 0.0012µF 50WV	T
C302	ECEA0JKS101I	Electrolytic, 100µF 6.3WV	
C303	ECEA1CKS100I	Electrolytic, 10µF 16WV	T
C304	ECUV1H273KBN	Ceramic, 0.027µF 50WV	T
C305	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C306	ECUV1H223KBM	Ceramic, 0.022µF 50WV	T
C307	ECEA1AKS101	Electrolytic, 100µF 10WV	
C310	ECEA1AKS221B	Electrolytic, 220µF 10WV	
C312	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C313	ECUV1H223KBN	Ceramic, 0.022µF 50WV	T
C314	ECUV1H102KBN	Ceramic, 0.001µF 50WV	T
C315	ECUV1H331KBN	Ceramic, 330pF 50WV	T
C316	ECUV1H223KBN	Ceramic, 0.022µF 50WV	T
C317	ECEA1HKS010I	Electrolytic, 1µF 50WV	T
C318	ECUV1H472KBN	Ceramic, 0.0047µF 50WV	
C319	ECEA1HKSR47I	Electrolytic, 0.47µF 50WV	
C320	ECEA1EKS3R3B	3.3µF 25WV(CQ-2650EU)	
C321	ECEA1EKS3R3B	Electrolytic, 3.3µF 25WV	
C322	ECEA1EKS3R3B	Electrolytic, 3.3µF 25WV	
C323	ECEA0JKS470IV	Electrolytic, 47µF 6.3WV	
C340	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C341	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C342	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C343	ECUV1H104KBN	Ceramic, 0.1µF 50WV	T
C349	ECUV1H222KBN	Ceramic, 0.0022µF 50WV	T
C350	ECUV1H222KBN	Ceramic, 0.0022µF 50WV	T
C401	ECEA1ESN4R7IV	Electrolytic, 4.7µF 25WV	T
C402	ECEA1AKS101	Electrolytic, 100µF 10WV	
C408	ECUV1H103KBN	Ceramic, 0.01µF 50WV	T
C410	ECUV1H103KBN	Ceramic, 0.01µF 50WV	T
C601	ECUV1H220JCN	Ceramic, 22pF 50WV	T
C602	ECUV1H220JCN	Ceramic, 22pF 50WV	T
C612	ECEA0JKS331I	Electrolytic, 330µF 6.3WV	
C614	ECEA0JKS331I	Electrolytic, 330µF 6.3WV	
C615	ECEA0JKS331I	Electrolytic, 330µF 6.3WV	
C616	ECEA0JKS331I	Electrolytic, 330µF 6.3WV	
C625	ECEA1VKS4R7I	Electrolytic, 4.7µF 35WV	
C630	YEU05B101K	Ceramic, 100pF 50WV	
C631	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C701	ECEA0JKS101B	100µF 6.3WV(CQ-2650EU)	
C707	ECEA1AKS221I	Electrolytic, 220µF 10WV	
C708	ECEA1AKS221I	Electrolytic, 220µF 10WV	
C709	ECEA1AKS221I	Electrolytic, 220µF 10WV	
C715	ECEA0JKS470IV	Electrolytic, 47µF 6.3WV	
C717	ECEA1CKS100I	Electrolytic, 10µF 16WV	
C718	ECEA1HKS010I	Electrolytic, 1µF 50WV	
C720	ECEA1CU332C	Electrolytic, 3300µF 16WV	T
C726	ECUV1H103KBN	Ceramic, 0.01µF 50WV	T
C735	YEE05Y103N	0.01µF 50WV(CQ-2650EU)	
C751	ECEA1CKS100I	Electrolytic, 10µF 16WV	

DISPLAY BLOCK [E-4C150]

Ref. No.	Part No.	Part Name & Description	Remarks
C901	ECUV1H223KBN	Ceramic, 0.022µF 50WV	T
C902	ECUV1H104ZFN	Ceramic, 0.1µF 50WV	T
C903	ECUV1H104ZFN	Ceramic, 0.1µF 50WV	T

1.4. Resistors

MAIN BLOCK [E-4C149]

Ref. No.	Part No.	Part Name & Description	Remarks
R11	ERJ8GEYJ332V	Chip, 3.3kΩ 1/8W	
R13	ERJ6GEYJ332	Chip, 3.3kΩ 1/10W	
R20	ERJ8GEYJ222V	Chip, 2.2kΩ 1/8W	
R21	ERJ6GEYJ224	Chip, 220kΩ 1/10W	
R22	ERJ6GEYJ222	Chip, 2.2kΩ 1/10W	
R23	ERJ8GEYJ122V	Chip, 1.2kΩ 1/8W	
R24	ERJ6GEYJ153	Chip, 15kΩ 1/10W	
R53	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R54	ERJ6GEYJ104	Chip, 100kΩ 1/10W	
R56	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R57	ERDS2TJ822	Carbon, 8.2kΩ 1/4W	
R58	ERJ6GEYJ392	Chip, 3.9kΩ 1/10W	
R59	ERJ6GEYJ392	Chip, 3.9kΩ 1/10W	
R60	ERJ6GEYJ181	Chip, 180Ω 1/10W	
R61	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R200	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R201	ERJ6GEYJ333	Chip, 33kΩ 1/10W	
R202	ERJ6GEYJ270	Chip, 27Ω 1/10W	
R203	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R204	ERJ8GEYJ124V	Chip, 120kΩ 1/8W	
R205	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R206	ERJ6GEYJ224	Chip, 220kΩ 1/10W	
R207	ERJ6GEYJ151	150Ω 1/10W(CQ-2650EU)	
R207	ERJ6GEYJ681	680Ω 1/10W(CQ-2500CEU)	
R208	ERJ6GEYJ821	Chip, 820Ω 1/10W	
R210	ERJ6GEYJ822	8.2kΩ 1/10W(CQ-2650EU)	
R211	ERJ6GEYJ392	3.9kΩ 1/10W(CQ-2650EU)	
R212	ERJ6GEYJ123	12kΩ 1/10W(CQ-2650EU)	
R213	ERJ8GEYJ183V	Chip, 18kΩ 1/8W	
R214	ERJ6GEYJ682	Chip, 6.8kΩ 1/10W	
R215	ERJ6GEYJ223	Chip, 22kΩ 1/10W	
R216	ERJ6GEYJ183	Chip, 18kΩ 1/10W	
R217	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R218	ERJ6GEYJ182	Chip, 1.8kΩ 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R219	ERJ6GEYJ393	Chip, 39kΩ 1/10W	
R220	ERJ6GEYJ101	100Ω 1/10W(CQ-2650EU)	
R221	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R222	ERJ6GEYJ471	470Ω 1/10W(CQ-2650EU)	
R223	ERJ6GEYJ103	10kΩ 1/10W(CQ-2650EU)	
R224	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R225	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R226	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R227	ERJ6GEYJ105	Chip, 1MΩ 1/10W	
R228	ERJ6GEYJ105	Chip, 1MΩ 1/10W	
R229	ERJ6GEYJ105	Chip, 1MΩ 1/10W	
R230	ERJ6GEYJ105	Chip, 1MΩ 1/10W	
R231	ERJ6GEYJ105	Chip, 1MΩ 1/10W	
R234	ERJ6GEYJ223	Chip, 22kΩ 1/10W	
R240	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R241	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R250	ERJ8GEYJ122V	Chip, 1.2kΩ 1/8W	
R251	ERJ8GEYJ104V	Chip, 100kΩ 1/8W	
R300	ERDS2TJ102	Carbon, 1kΩ 1/4W	
R301	ERJ6GEYJ333	Chip, 33kΩ 1/10W	
R302	ERJ6GEYJ270	Chip, 27Ω 1/10W	
R303	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R304	ERJ8GEYJ124V	Chip, 120kΩ 1/8W	
R305	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R306	ERJ6GEYJ224	Chip, 220kΩ 1/10W	
R307	ERJ6GEYJ151	150Ω 1/10W(CQ-2650EU)	
R307	ERJ6GEYJ681	680Ω 1/10W(CQ-2500CEU)	
R308	ERJ6GEYJ821	Chip, 820Ω 1/10W	
R309	ERDS2TJ101	Carbon, 100Ω 1/4W	
R310	ERJ8GEYJ822V	8.2kΩ 1/8W(CQ-2650EU)	
R311	ERJ6GEYJ392	3.9kΩ 1/10W(CQ-2650EU)	
R312	ERJ8GEYJ123V	12kΩ 1/8W(CQ-2650EU)	
R313	ERJ8GEYJ183V	Chip, 18kΩ 1/8W	
R314	ERJ6GEYJ682	Chip, 6.8kΩ 1/10W	
R315	ERJ6GEYJ223	Chip, 22kΩ 1/10W	
R316	ERJ6GEYJ183	Chip, 18kΩ 1/10W	
R317	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R318	ERJ6GEYJ182	Chip, 1.8kΩ 1/10W	
R319	ERJ6GEYJ393	Chip, 39kΩ 1/10W	
R320	ERJ6GEYJ101	100Ω 1/10W(CQ-2650EU)	
R321	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R322	ERJ6GEYJ471	470Ω 1/10W(CQ-2650EU)	
R323	ERJ6GEYJ103	10kΩ 1/10W(CQ-2650EU)	
R324	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R325	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R326	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R327	ERJ6GEYJ105	Chip, 1MΩ 1/10W	
R332	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R333	ERJ6GEYJ153	Chip, 15kΩ 1/10W	
R334	ERJ8GEYJ223V	Chip, 22kΩ 1/8W	
R340	ERDS2TJ561	Carbon, 560Ω 1/4W	
R341	ERD25TJ561	Carbon, 560Ω 1/4W	
R350	ERJ8GEYJ122V	Chip, 1.2kΩ 1/8W	
R351	ERJ8GEYJ104V	Chip, 100kΩ 1/8W	
R404	ERDS2TJ152	Carbon, 1.5kΩ 1/4W	
R405	ERJ6GEYJ152	Chip, 1.5kΩ 1/10W	
R406	ERJ8GEYJ152V	Chip, 1.5kΩ 1/8W	
R407	ERJ6GEYJ471	Chip, 470Ω 1/10W	
R408	ERJ8GEYJ181V	Chip, 180Ω 1/8W	
R410	ERD25TJ473	Carbon, 47kΩ 1/4W	
R500	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R501	ERJ6GEYJ5R6	Chip, 5.6Ω 1/10W	
R601	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R602	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R603	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R604	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R605	ERD25TJ182	Carbon, 1.8kΩ 1/4W	
R606	ERD25TJ182	Carbon, 1.8kΩ 1/4W	
R609	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R625	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R626	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R629	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R630	ERJ6GEYJ393	Chip, 39kΩ 1/10W	
R631	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R632	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R633	ERDS2TJ183	Carbon, 18kΩ 1/4W	
R635	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R640	ERD25TJ104	Carbon, 100kΩ 1/4W	
R651	ERJ6GEYJ222	Chip, 2.2kΩ 1/10W	
R652	ERJ6GEYJ562	Chip, 5.6kΩ 1/10W	
R654	ERDS2TJ473	47kΩ 1/4W(CQ-2650EU)	
R655	ERJ6GEYJ473	47kΩ 1/10W(CQ-2650EU)	
R656	ERDS2TJ473	47kΩ 1/4W(CQ-2650EU)	
R667	ERJ6GEYJ683	Chip, 68kΩ 1/10W	
R703	ERD25FJ5R6	Carbon, 5.6Ω 1/4W	T
R704	ERD25TJ681	680Ω 1/4W(CQ-2650EU)	
R721	ERD25FJ5R6	Carbon, 5.6Ω 1/4W	T
R722	ERD25TJ102	Carbon, 1kΩ 1/4W	
R723	ERJ6GEYJ101	Chip, 100Ω 1/10W	
R727	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R728	ERD25TJ680	Carbon, 68Ω 1/4W	
R736	ERJ6GEYJ564	Chip, 560kΩ 1/10W	
R737	ERJ8GEYJ472V	Chip, 4.7kΩ 1/8W	
R738	ERJ6GEYJ330	Chip, 33Ω 1/10W	
R739	ERJ6GEYJ562	Chip, 5.6kΩ 1/10W	
R740	ERD25TJ472	Carbon, 4.7kΩ 1/4W	
R751	ERD25FJ2R7	Carbon, 2.7Ω 1/4W	
R752	ERJ8GEYJ103V	Chip, 10kΩ 1/8W	
R753	ERJ8GEYJ473V	Chip, 47kΩ 1/8W	
Z701	ERZG07DK470T	ZNR	T

DISPLAY BLOCK [E-4C150]

Ref. No.	Part No.	Part Name & Description	Remarks
R901	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R902	ERJ6GEYJ333	Chip, 33kΩ 1/10W	
R903	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R904	ERJ6GEYJ471	Chip, 470Ω 1/10W	
R905	ERJ6GEYJ471	Chip, 470Ω 1/10W	
R906	ERJ6GEYJ271	Chip, 270Ω 1/10W	
R907	ERJ6GEYJ271	Chip, 270Ω 1/10W	
R908	ERJ6GEYJ271	Chip, 270Ω 1/10W	
R909	ERJ8GEYJ151V	Chip, 150Ω 1/8W	
R910	ERJ8GEYJ151V	Chip, 150Ω 1/8W	
R911	ERJ6GEYJ471	Chip, 470Ω 1/10W	
R912	ERJ6GEYJ181	180Ω 1/10W(CQ-2500CEU)	

1.5. Connectors

MAIN BLOCK [E-4C149]

Ref. No.	Part No.	Part Name & Description	Remarks
CN210	YEAEPO053981	Connector, 5P	
CN602	YEAE4C01084	Connector , 7P(CQ-2650EU)	T
CN680	YEAE4CDIN023	Connector, 8P DIN(CQ-2650EU)	T
CN701	YEAE4CCON005	Connector , 12P	T
CN901	YEAETKCF08PS	Connector , 8P	
CP602	YEAE4C01083	Connector , 7P(CQ-2650EU)	T

DISPLAY BLOCK [E-4C150]

Ref. No.	Part No.	Part Name & Description	Remarks
CP901	YEAETKCF08XS	Connector , 8P	

1.6. Electric Parts

VARIABLE RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
VR201	YEVK4C09B10A	Bass/Treble VR	T
VR203	YEVK4C12A018	Main VR	T

POSISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
PR701	YERT7AR4R7MT	Posistor	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW902	YEAS094C020	Switch	T
SW903	YEAS094C020	Switch	T
SW904	YEAS094C020	Switch	T
SW907	YEAS094C020	Switch	T
SW908	YEAS094C020	Switch	T
SW909	YEAS094C020	Switch	T
SW911	YEAS094C020	Switch	T
SW912	YEAS094C020	Switch	T
SW913	YEAS094C020	Switch	T
SW914	EVQPJJ04T	Switch(CQ-2650EU)	
SW916	YEAS094C020	Switch	T
SW919	EVQPJJ04T	Switch	
SW923	YEAS094C020	Switch	T

CRYSTAL

Ref. No.	Part No.	Part Name & Description	Remarks
XL600	YEXL4C45TT	Crystal (4.5MHz)	T

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L101	YELT02C470KT	Coil	T
L700	YETQ024C014V	Choke Coil	T

LCD

Ref. No.	Part No.	Part Name & Description	Remarks
LCD901	YEXDCM4C059	LCD	T

1.7. Accessories

PRINTING

Ref. No.	Part No.	Part Name & Description	Remarks
	YFM284C267ZA	Instruction Book	T

INSTALLATION PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
	FX0214C079ZA	Mounting collar	T
	YEFG044C002	Rear Support strap	T
	FP-183	Screw Kit	T

1.8. Mechanical Parts

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
AJ51	YAA094C016ZA	ANT Rececteple	T
Z51	YEAL02007T	Surge Protector	
CN503	YEAM4CRCA025	Connector , 3P RCA(CD.C-IN), (CQ-2650EU)	T
CN504	YEAM4CRCA024	Connector , 3P RCA(PRE-OUT), (CQ-2650EU)	T
CN751	YEAE4C01055	Connector, 6P(Main-TapeDeck)	T
CP210	YEAE4C01078	Connector, 5P(TapeDeck-Main)	T
1	YFA074C031ZA	Front Plate	T(2-B)
2	YFF014C038ZA	Heatsink	T(3-B)
3	YFA094C082ZA	Right Plate	T(2-C)
4		Rear Plate	
	YFA084C027ZA	(CQ-2650EU)	T(3-C)
	YFA084C028ZA	(CQ-2500CEU)	T(3-C)
5	YFA054C030ZA	Under Cover	T(1-B)
6	YEAT03420	Terminal	(1-C) (2-C)
7	FX0214C206ZA	VR Bracket	T(1-B)
8	FX0214C172XA	IC Bracket	T(2-B)
9	FX0214C161ZB	LCD Case	T(2-A)
10	YEAD2650EU	Panel Light (LCD)	T(2-A)
12	FX0054C030ZA	Spring Plate	T(2-C) (3-B)
13		ESC Ass'y	
	YFC024C381ZA	(CQ-2650EU)	T(2-A)
	YFC024C405ZA	(CQ-2500CEU)	T(2-A)
14	YFS014C027ZA	Sponge	T(4-A)
15	SHR4C102	Wire Clamper	T(4-B)
16	YFX464C008ZA	Eject Lever	T(4-A)
17	FX0214C205ZA	Deck Bracket	T(3-A)
18	YFE134C162ZA	Butten (EJECT)	T(4-A)
19	YFE134C163ZA	Butten (REW)	T(4-A)
20	YFE134C164ZA	Butten (FF)	T(4-A)
22	YFE074C051ZA	Knob (BT)	T(2-A)
23	YFE074C047ZA	Knob (BASS/TRE)	T(2-A)
24	YFE074C050ZA	Knob (H) Ass'y	T(2-A)
25	YFA034C036ZA	Upper Cover	T(4-B)
26	YEJV014C002A	Bolt	T(3-C)
31	YEJS064C001	Screw	T
32	YEJT034C001	Screw	T
33	YEJT034C007	Screw	T
34	YEJT034C019	Scew, 3 *12mm	T
35	XSB3+6FXS	Screw, 3 * 6mm, (CQ-2650EU)	T
36	XSS5+6FXS	Screw, 5 * 6mm	T
37	XTB3+6FFXS	Screw, 3 * 6mm	
38	XTN2+6C	Screw, 2 * 6mm	T

2 Tape Player Parts List

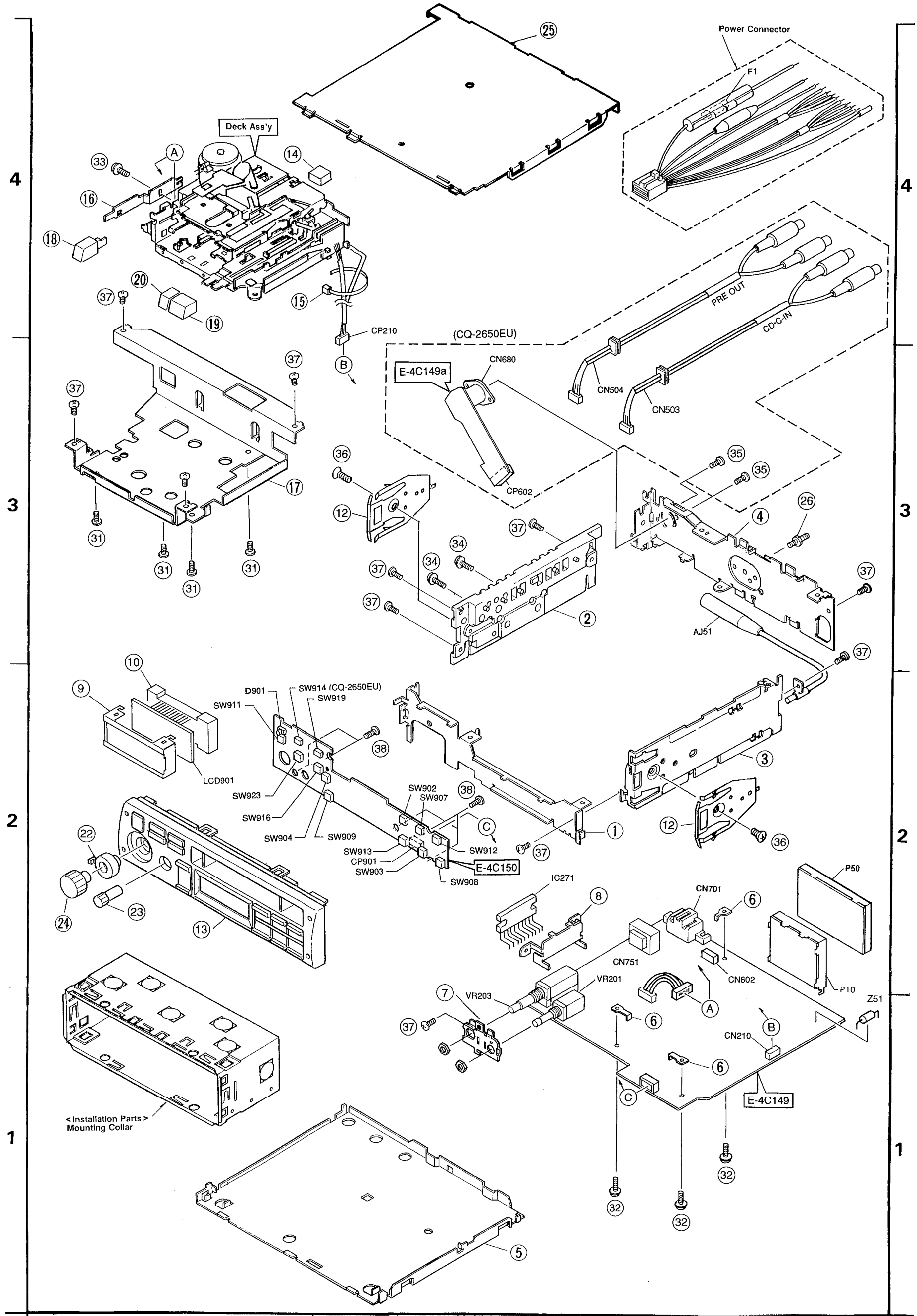
Remarks: YEFD044C017 [97.5.14]

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
1	YEFA011605	Chassis Rivet Ass'y	(2-B)
3	YEAHP7742BB	P Head P-7742 BB-0573	(1-C)
4	YESAS099	Head SW Ass'y(D)	(2-C)
5	YEP0FX2802	Head Panel Ass'y(D)	(1-C)
6	YEFX030095	P. Gear Metal	(3-C)
7	YEFX003778	P. Gear	(2-C)
9	YEFX249414	Pinchi Roller Arm (F) Ass'y	(3-B)
10	YEFX249415	Pinchi Roller Arm (R) Ass'y	(2-A)
12	YEP0FX2803	MG Plate Ass'y	(2-A)
14	YESAS098	Power SW Ass'y	(3-A)
16	YEFX0052093	Reverse Sprig	(4-B)
17	YEFX0461773	P.S. Actuator Plate B	(4-B)
18	YEFX030096	Pack Slider B	(4-B)
19	YEFX233484	Case Lifter B	(4-B)
20	YEP0FX2804	Cassette Case Ass'y	(3-B)
22	YEFX0052094	Push Lever Spring	(3-A)
23	YESFX215016	Push Lever B Rivet Ass'y	(3-A)
25	YEFX0461776	Main Plate	(3-C)
26	YEFX0052099	H.S. spring	(3-C)
29	YEAK01026	Motor Ass'y MCI-5U3LCA	(3-B)

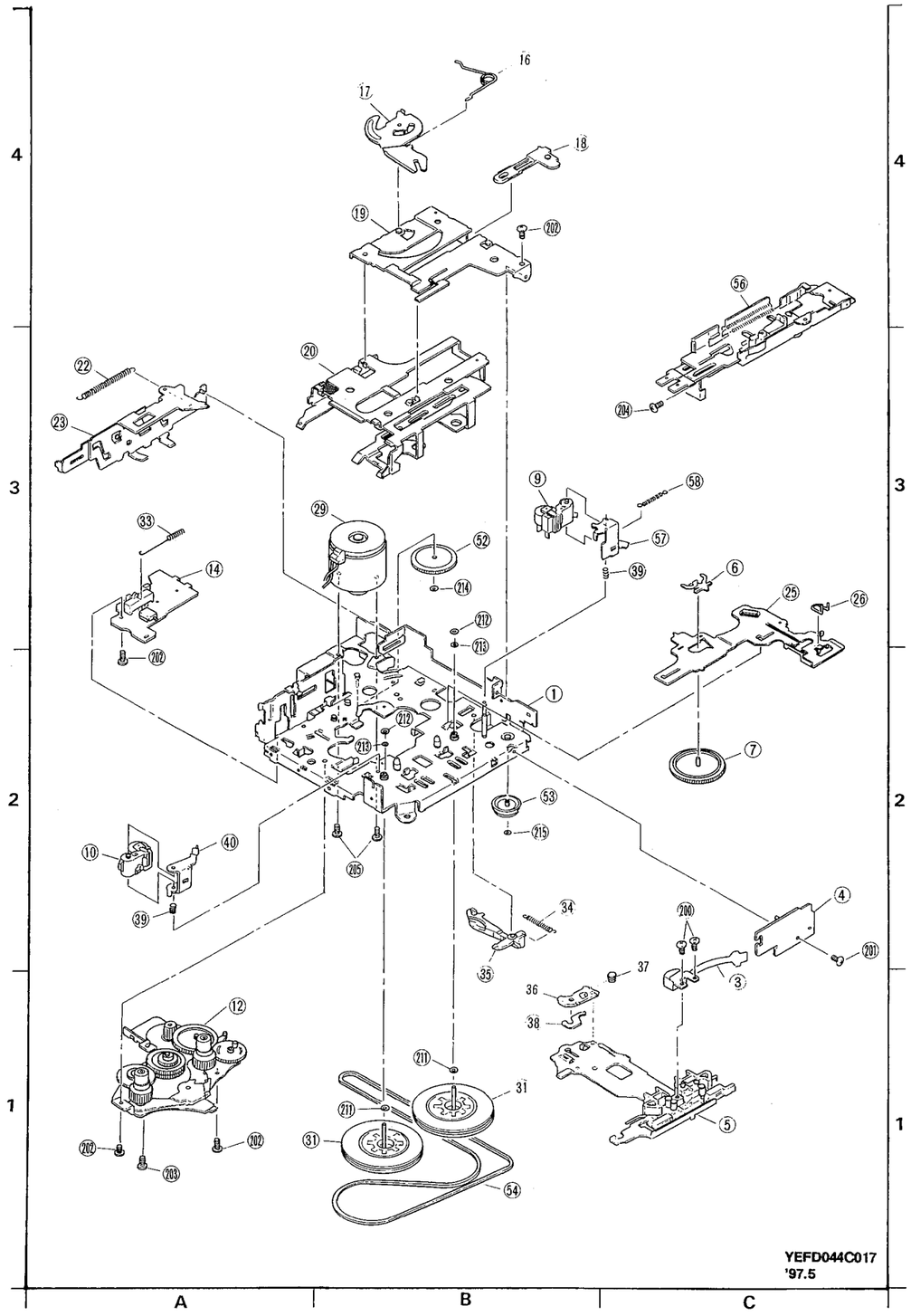
EXPLODED VIEW (Unit) MODELS CQ-2650EU/2500CEU

■ Numbers in ○ are indicated REF.NO. in the REPLACEMENT PARTS LIST



EXPLODED VIEW (Tape Deck) MODELS CQ-2650EU/2500CEU

■ Numbers in ○ are indicated REF.No. in the REPLACEMENT PARTS LIST

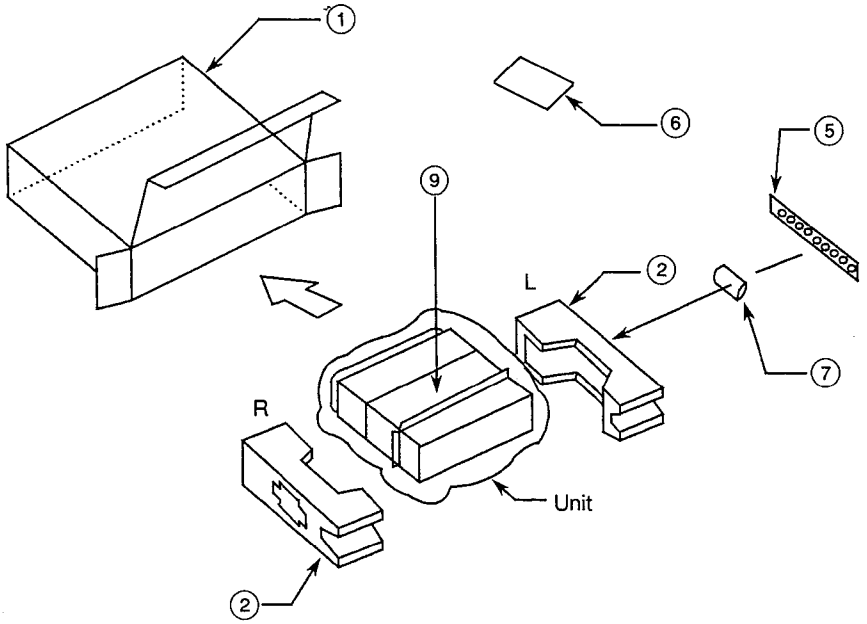


Ref. No.	Part No.	Part Name & Description	Remarks
31	YEFX213212	FL Capstan Ass'y	(1-B)
33	YEFX0052097	P. SW Spring	(3-A)
34	YEFX0052096	TA. Spring	(2-B)
35	YEFX249416	Trigger Arm	(2-B)
36	YEFX249417	H.P. Push Arm B	(1-B)
37	YEFX218289	H.P. Roller	(1-C)
38	YEFX249418	H.P. Push Plate	(1-B)
39	YEFX0052098	P.P. Spring	(2-A) (3-C)
40	YEFX0461774	HP Return Arm	(2-A)
52	YEFX003510	Main Gear V	(3-B)
53	YEFX026120	Middle Pulley	(2-B)
54	YESFR03004	Main Belt	(1-B)
56	YEP0FX2806	FR Lever Ass'y	(3-C)
57	YEFX0461775	Lock Plate	(3-C)
58	YEFX0052095	Lock Plate Spring	(3-C)
200	YEJS06132	Fix Screw	(2-C)
201	YEJS06174	Tams Screw (Tapping) S2.0x5	(2-C)
202	YEJT03118	Camera Screw (Tapping) S2.0x3	
203	YEJS06190	Camera Screw (Tapping) S3.2x3	(1-A)
204	YEJS06191	Camera Screw (Tams) 2.6x4.5	(3-C)
205	YEJS06130	Tams Screw 2.0x3	(2-B)
211	YESJW01020	Himelon Washer 1.55x3.8x0.13	(1-B)
212	YEJW05136	Lumilar Washer (Cut) 1.25x3.2x0.5	(2-B) (3-B)
213	YESJW01021	Himelon Washer 1.55x3x0.2	(2-B) (3-B)
214	YEFX014053	Himelon Washer (Cut) 1.2x3x0.25	(3-B)
215	YEJW05130	P. Washer (Cut) 0.85x2.8x0.25	(2-B)

PACKING PARTS LIST

<CQ-2650EU>

- *Item numbers listed below should not order regular spare parts.*



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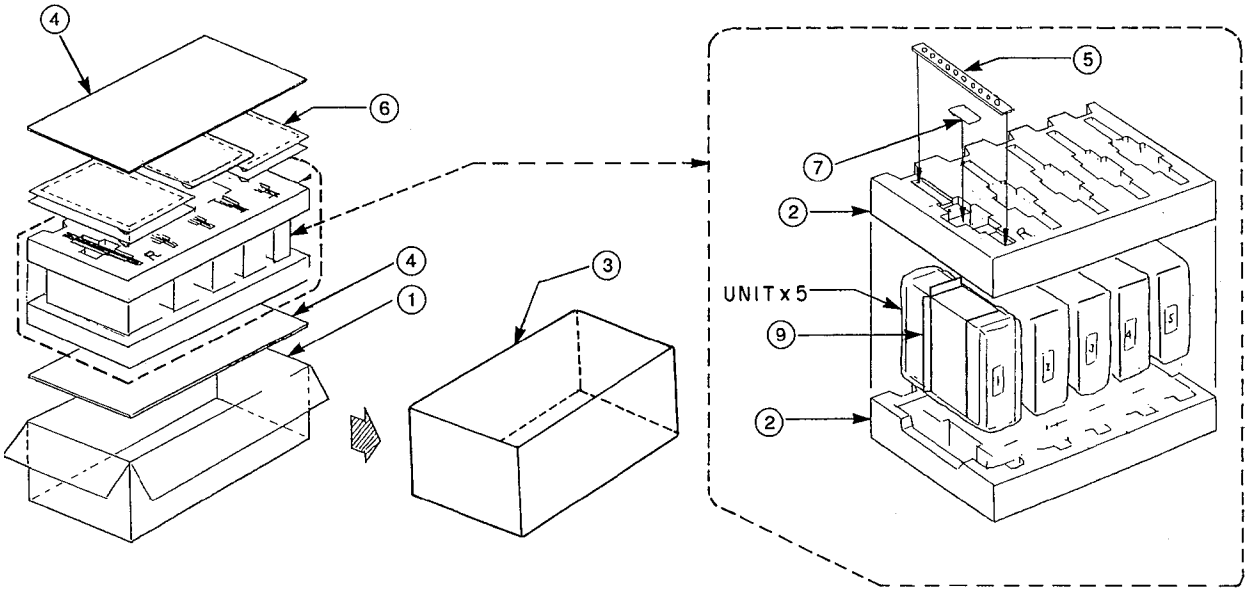

● *Item numbers listed below should not order regular spare parts. (not available)*

Item No.	Parts No.	Parts Name & Description	Q'ty	Remarks
①	—	Inner Carton	1	Not available
②	—	Paking Pad, Rihgt and Left	1	Not available
③	—	Outer Carton (CQ-2500CEU only)	1/5	Not available
④	—	Carton Plate (CQ-2500CEU only)	2/5	Not available
⑤	YEFG044C002	Rear Support Strap	1	
⑥	—	Operating Instructions Kit	1	Not available
	YFM284C267ZA	Operating Instructions	(1)	
	—	Warranty Card for USA	(1)	Not available
	—	Servicenter List	(1)	Not available
	—	W/B Service List	(1)	Not available
⑦	FP-183	Screw Kit	1	
⑧	FX0214C079ZA	Mounting Collar	1	